FMI Quarterly
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BUILDING VALUE

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FEATURES

This Quarter:
Wealth-Building Ideas

Dear Reader:

This issue of *FMI Quarterly* brings you wealth-building ideas and wisdom from both current and former FMI associates. Our focus is on Building Value using the cornerstones of people and customers. This is a great season for reflection and we hope these writings provide good stimulation for that pursuit.

Former FMI associates include Keith Reester, now Director of Public Works for the city of Loveland, Colorado, and Bob Leibforth, who worked with Building One Corporation and Encompass Services after FMI, now an independent consultant based out of Tampa, Florida.

Old hands with FMI include Cynthia Paul sharing Secrets of Execution; Ben Brahinsky on the 51% Conundrum; Stuart Phoenix discussing key issues of valuation; and Tony Perrone, Adam Patnaude, and Stevan Simich with their annual feature comparing results of publicly owned engineering and construction businesses. Training consultant Kelley Chisholm and training specialist Ashley Robertson discuss implications of diversity. Mike Perriccio writes on developing talent, while Tim Spiker uses the television reality series, “The Apprentice,” to illustrate some key points of leadership. Hoyt Lowder joins Bob Leibforth to revisit the Concept of the Customer. Eric Sanderson brings us keys to finding your market niche. Peggy Lawless makes the case for why design matters. Dennis Doran moderates a top-notch panel of construction owners.

As a construction owner and former FMI consultant, Keith Reester brings valuable perspectives on owner relationships.

Our featured interview this quarter provides insights into family business as Cynthia Paul interviews Jim and Pat Ryan of The Ryan Companies.

It's another issue of valuable information as we bring you the best of leadership and management topics in the construction industry.

Currently, we are contemplating some format changes, including reducing the length of most of our articles. Your views matter. Would you like more, shorter articles, or do you prefer the current balance of longer, more in-depth articles coupled with shorter pieces from our departments? We appreciate your past suggestions and look forward to hearing from you.

Sincerely,

Jerry Jackson
FMI Chairman
FMI Quarterly Publisher and Senior Editor

Roundtable Discussion: Price or Value?

In our practice, we often talk with contractors about the importance of value over price, but both owners and contractors seem to be locked into a low-bid mentality. Contractors have become suspicious of these terms, saying that value is just another way of saying: cut your price. Owners ask, "Why be concerned with value if all contractors are the same?" To shed some light on these issues, we invited representatives from three top owner organizations in an attempt to pin down the question once and for all. Is price more important than value when purchasing construction services?

Price or Value — Which Comes First for Owners?

***Tom Gormley**, vice president of design and construction, works for HCA, Inc., the nation's leading provider of healthcare services. "HCA is composed of locally managed facilities that include approximately 191 hospitals and 82 outpatient surgery centers in 23 states, England, and Switzerland." **Roger Lane**, manager of contract labor and services, works for DTE Energy, one of the nation's largest full-service energy and energy technology companies. **Tom Weise** is director of facilities, materials & services for Intel Corporation. "In 2003, Intel spent $3.7 billion on capital investments to help build manufacturing capacity and increase manufacturing efficiency." **Dennis Doran** is a senior consultant in FMI's Owners Group. He serves as our moderator for this discussion.*

We have a greater responsibility than just to see that new buildings and structures get built.

Doran: When purchasing construction services, how can you be assured that you are getting the best price or value? Moreover, why do contractors find it so difficult to sell to you?

Weise: It isn't true that it's difficult to sell to us. The contractor community needs to focus on how they do the project. The industry needs to get out of the bid-only mode of thought. We have developed a "scorecard" that we use to qualify contractors.

Gormley: We have a greater responsibility than just to see that new buildings and structures get built. We have to be able to demonstrate to shareholders that we are spending their money wisely. Usually, that means using some kind of competitive bid process, including possibly internet auctions.

Lane: We are maybe not all the way there yet as far as DTE Energy is concerned, but we are moving away from the price situation. Price certainly drove things quite a bit under the old Detroit Edison format, but the situation has changed considerably. We have changed our focus to establish what we call "alliance contractors," and there is a big emphasis placed on the "scorecard" that Tom mentioned — the scheduled completion or scheduled performance budget, quality, safety, and customer satisfaction. There are eight or nine measurables that are tallied to give an overall score, and price is a very small part of that score.

Doran: So how do you satisfy yourself that when you receive proposals from contractors that you have contractors qualified to do your work? In other words, how do you prequalify contractors prior to entertaining their proposals?

Weise: Before I answer, let me say that we are aggressive on price in the bidding process. We look at the "should" cost and the market rate, and we combine that with the bid proposal. Then, we have a pretty good idea on the bid competitiveness. The decision tree starts with all of our contractors being prequalified. They only bid to, what I have coined, "a closed market." Our bidding processes are not open market, so we have a set number of contractors, with 100% bidding on those jobs. Each time we go through the process, we compare the historical, should cost, bottoms-up estimate, and the market costs. Then, we use the differentiator on job performance. If contractors do not meet the job performance criteria but are competitive, they may go on the call-to-corrective-action report and be scrutinized on their performance for a period of time. They have to demonstrate how they are going to get off that corrective action report. Therefore, it is a combination of factors.

There are different levels of the competitive aspect, and the reality is that, the way most contractors are set up, they are really just construction managers.

Lane: I think Tom's point is valid. We have shareholders; we must be competitive. We are not going to buy services from a poor-performing contractor. We are going to work with contractors that are continually competitive, and we will take ownership on approving them to a certain level.

Doran: Tom Gormley, any follow-up thoughts?

Gormley: We use a little different approach. We typically outbid with Skanska, Bovis, Kittrell, or whomever, and we would negotiate the contract with them at a fixed profit and a fixed overhead. Then, we bid out all of the subs.

There are different levels of the competitive aspect, and the reality is that, the way most contractors are set up, they are really just construction managers. They are not self-performing, so the cost of work is in the subcontractors' contracts. So we are actually picking contractors based on the team they propose, their understanding of the schedule, their past experience on these kinds of projects etc., and then we bid out the second tier. In essence, we are outsourcing our project management to these firms and letting the competitive bid process work at a different level.

If we had fewer projects, say 10 projects a year, we might perform our own project management, not even use those guys [general contractors], and bid the subs directly. With the approximately 40 projects we perform a year, there is no way we can do that. That is why we outsource to them as project management. It sounds like what we do is a little different from what the others do, as far as taking bids from a contractor for the whole project.

Doran: So does the term "contractor" mean something different for each of you and for different owners? The contractor to one owner may be the general contractor who owns all of the second-tier contracts, and to others, it may mean a general contractor who is a construction manager, or a CM that holds the subcontracts directly. Is the word "contractor" not sufficient to describe what it is we are trying to achieve?

Gormley: For us, those companies traditionally called general contractors are construction managers more than contractors.

Weise: I think there is a graying of the lines between what general contracting and construction management is, or even the line between architecture and engineering and the trade. That line is blurring, and from our position, we contract for a service to build something; we want all of those services competitively bid. If it is a general contractor, a CM, or the trade, we expect the CMs to bid 100% of the trade and the GCs to do the same. So it is beginning to blur a little bit, and I think you are right, the word "contractor" is changing in its meaning, and I am not sure the market is addressing that. So we don't differentiate; we are purchasing a service and that service is for building a building.

We are going to bid all the way down to the trade level, and we expect the CMs and the GCs to do the same. We will bid out the CM work and the GC work to make sure that we have the right value for the right scope of work. Our scopes of work are so varied that, even though we have considered moving toward the alliance like DTE Energy and like Tom Gormley's operation, we are not convinced that we have a data center that offers us the ability to analyze competitiveness without bidding just yet. I think it is in the future for us.

Doran: And key to those future alliances would be the scorecards that you described and are using to capture and build a database of actual performance experience?

Weise: It's the scorecard as well as the ability to project what the market cost may be in any given region. Whether we are building in China or Hudson, Mass., we must be able to say the market has this kind of cost capability. Then, we will have a better idea of what we think the bids and fees will be in a competitive scenario. I don't think we have gathered that ability as an owner with 100% confidence. Generally speaking, most owners' internal data systems are weak to nonexistent, and so they are forced to be in a bidding mode, because they can't prove to their internal auditors and shareholders that they are competitive. It is a little bit of the chicken and the egg, but I believe that the future is changing as we speak.

Doran: Roger, how is that future changing from the perspective of a utility company?

Lane: We are in an evolutionary stage, and even though we have alliance contractors, we bid out a tremendous amount of work. We have seen a spectrum of contractors from what I would consider to be traditional subs and traditional generals, up to some rather esoteric types of delivery methods. We are pressuring the contracting community to do as Tom Weise has indicated. We have to see some really significant changes, because we need to get more value out of the whole process.

You asked the question earlier concerning how we select our contractors; we have a formal supplier-review panel. It actually involves, not our purchasing folks, but our five operating groups, and there is a thorough and detailed examination of any new supplier of labored services that we elect to put on our supplier list. We work with these folks, and if they are successful in bidding some projects, we do a very detailed performance review. We are not quite as formal as Tom has indicated, but there is a tie to that performance and remaining on the selected bidders list.

Doran: Tom, you mentioned the great variation in the work scope on your projects. Let's talk about your concerns for the scope of work. How are you able to be satisfied that on a competitive-bid basis you are going to get the expected results from a service provider? Where is the emphasis in terms of scope development? What do you rely on — your own data and internal resources or outside support?

Weise: Historically, we used the fast-track design and construct method, which meant that, in reality, we developed the scope of work as the project was released and throughout the entire process. This resulted in a higher percentage of change rate than necessary, budget overruns, and schedule impact. About five years ago, we started doing, what I think many other owners have done successfully, and that is to develop the scope of work at the pre-programming phase and earlier.

We have a document that is called "the project execution plan." It was initiated about two years ago, and it forces the development of the scope of work at a very early point in the project. We gather that information from the partners for whom we are building. We analyze what we have done historically, combine it with the technology roadmap we need to beat, and use the historical building performance to develop the scope of work. So I think the message is that we are getting much better at developing our expectations, and in turn, making it easier for the general contractors or the CM contractors, or the trades to provide a more accurate bid. We are seeing that transition. I would like to see it be more aggressive, but it is a significant change for our business model, and we have seen a lot of acceptance.

Gormley: We use a traditional method for hiring outside architectural engineers. Our in-house planners develop what we call a strategic-planning unit, which is a definition of how many operating rooms, patient beds, etc. are needed per unit, and then they turn it over to the external architect-engineers to define bid packages, which we can use to make preliminary budgets.

We seem to be adequate in terms of getting accurate numbers together along with a full set of instruction documents that we can bid out to all the subcontractors and use with the construction managers. The problem we fear is that the architects are not really engineers constructing a great set of bid documents, so you wind up with an addendum to an addendum to a plan to get clarification. If there is a weak link — that's it. I think that is probably not unusual in the industry for the working drawings from the engineers and architects to be completed not as you would like them.

The issue of the scope of work is a very significant one for us. We could do a lot better. There needs to be a lot more emphasis.

Doran: Roger, what is DT's perspective on the issue of scope of work?

Lane: The issue of the scope of work is a very significant one for us. We could do a lot better. There needs to be a lot more emphasis. We are a highly fragmented organization, and when we put what I feel is the appropriate amount of effort into a scope development, it pays off significantly in the quality of the delivered project as well as with significant reductions in the overall price.

Doran: We started out by asking whether or not we could or should hire a contractor on any basis other than price? The answer to that question appears to be a qualified "yes," and we have talked a bit about alliances and scorecards. What are the key ingredients in your approach to buying construction services and other related services that enable you to be satisfied that the competitive bid is going to result in on-time, on-budget delivery?

Weise: Well, if you are asking for the Rosetta Stone, I don't believe there is one because each owner may have a different set of requirements. In our case, we measure what we feel is important to our job, and that includes safety performance, the quality of their performance, the competitiveness of their performance, the team's performance, the cost-idea reduction, and the value-engineering performance. There are many key elements that we grade, so I would have to say that the way we apply it, the key elements on top of the bid price, are the job performance criteria that we establish. They may vary by owner. We look at this every year, and so far, those are the correct categories. We are happy with what we have established.

Doran: Tom Gormley, do you want to weigh in on that?

Gormley: Many of our projects are working around and adding onto existing medical buildings of some description. One of the critical things for us is the people. We focus strongly with our construction managers on finding the right superintendent. We focus on the team they put together — the project manager who is out there day-to-day in the hospital, dealing with the department heads, the CEOs of the hospital, and making sure we keep the patients, staff, and the families safe. We really push hard to have the contractor or construction managers identify these people on the front end. That probably drives our selection process as much or more than anything else does. The fees are well defined early on, so fees are not as much of an issue. Really, it is who they are going to put out there that makes the difference. That person, or those people, are going to be the difference between the bid being a successful project or a big mess; in addition, there is their understanding of the project, the phasing, and the schedule. Those kinds of aspects can make a developer's project successful.

Doran: Roger, what are the things that are important to DTE to bring projects in on time and on budget?

Lane: Well again, it is a complex process. We have gone away from a centralized, construction-maintenance group, which we had for years. We are sort of evolving back to that a little bit to get a grip on the construction process. It's tough to keep highly skilled and experienced people in the owner organization that have a lot of experience in the construction arena. We are dealing with that, but it is a difficult situation, right now. If you don't have people who know what is going on in the construction process and the owner organization, you get difficult problems.

Doran: So, ultimately, getting the best value comes down to people and skills? Any other comments on that?

Weise: I just want to comment on things both Roger and Tom highlighted. It is something that concerns Intel as well as many other owners, and that's the quality and skill level of the individuals in the construction field. In the owner community, we are getting more and more concerned about those skill levels. That may be the differentiator in the future, who has the best team. I also think the teams are going to be smaller — the good teams are going to get smaller in terms of quantity and with higher skill levels over time.

Lane: One thing that came to my mind is that we have a major ongoing maintenance modification project that we have in Edison. The work totals millions of dollars a year. It has been ongoing now for more than a decade, and it has been very successful because of high quality, experienced people in the owner organization, as well as some very dedicated, and high-quality people in the contractor organization. We have worked very hard to see how to replicate this. It is not very easy to do. You can't find the people. It is a very difficult situation.

The No. 1 concern that keeps me awake at night is the quality, skill level, and capability of the construction community.

Doran: Let's look to the future now. You all have slightly different approaches for focusing your procurement activity. How do you evaluate performance in process, and what is the significance of key personnel? How will you continue to satisfy the needs of your respective companies to build projects in the future?

Weise: Well, that's a great question. I think it is one that haunts all of us. But if I were to pick two items, I would say that the No. 1 concern that keeps me awake at night is the quality, skill level, and capability of the construction community. The reason I am concerned about that is because, as owners, we are being squeezed to reduce our internal workforce in terms of construction expertise. We are being pressured to outsource more in the future, but how do I guarantee that the capability to outsource in the trade/general contractor/CM and E/A community is going to be there to offset that strategy? That has me very concerned. I am also concerned about the continuing quality and depth of our internal resources.

The next biggest concern I see in the future is a blurring of the lines between the traditional construction trade/GC/CM/engineering firms; there is a blurring of the responsibility. I am not sure what that new entity, if there is one, is going to look like. The question I have to ask myself is: Am I prepared to at least lead that and capitalize on it? Is it going to make me more competitive? So, the traditional construction method is changing, and can we capitalize on it?

Lane: I look at a couple of things. One is what I call the area of work-force availability. We are doing more and more work, but there is a graying of the workforce where there are insufficient numbers of appropriately skilled people in the owner community, the contractor community, and the trades community. A second item that I look at is this question of who is the customer. We are starting to address that a little bit with the Construction Users Roundtable. I think it is interesting that we have had a couple of the general presidents of some of the major trade unions come and address the owner group and actually recognize the owner as the one who pays the freight and is the ultimate arbitrator of quality, price, and schedule. I think we will need to put a lot more emphasis in that area.

Doran: From each of your perspectives, then, what do the contractors need to do to differentiate themselves with your companies as the industry begins to change in the future?

Weise: It would be my advice for the contracting community to begin thinking differently about the services they provide. They should come forward with new ideas that enable the owner to be competitive as they themselves become competitive. I believe that today there are some companies out there that are doing an excellent job in the contracting community. They are looking forward, changing their services, and coming to owners with a different, competitive capability and then working very hard at making those changes. There are many contractors that aren't doing that. So, those that are going to survive in the future are going to offer a little bit different service, enabling that owner to be more competitive while they in fact gain more market share. That is my advice. Embrace the change. Drive your business to competitiveness, and then, enable the owner to become more competitive.

It would be my advice for the contracting community to begin thinking differently about the services they provide. They should come forward with new ideas that enable the owner to be competitive as they themselves become competitive.

Lane: Again, I would echo what Tom is saying. I would add that hiring contractors as well as engineers, architects, and construction consultants has been somewhat of a dicey deal over the past many years. For an owner, the issue has been just beneath the surface. We sort of accept the problems and risks that go along with it. We need those services. I agree with Tom that there needs to be some significant changes with regard to the subcontractors, contractors, and architects/engineers to get them to focus on providing a value-added service. There are many resources that are tied up, for instance, in construction trade

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associations, and there are tremendous resources to potentially drive this change. I see the industry lagging in that arena.

Gormley: Part of it is that the construction managers need to add value to our piece of the equation. They need to understand our business and what is important to us. For example, in our world, minimizing the disruption to the hospital is important. They need to think about how you do that. The more important thing on our campus is not construction; it is healthcare. They have to consider that. The other thing that is being thrown into our arena is an issue like diversity. Our CEO has gotten behind this issue, and we are going to improve diversity not only in our own internal organization, but also with the companies we do business with — improving how the money is being spent and with whom it is spent. So they have to embrace those kinds of initiatives that are important to our company, as well. At the end of the day, they have to be able to do the other things that are also important to the owner.

Doran: Okay, let me punctuate this with a final brief question. Is it, or isn't it just about price?

Weise: No, it's not just about price. It is about a total capability; it is about making an owner competitive through the services you provide the contractor without going out of business. The reality is, if you focus just on price, you will be out of business, and it is not going to make us successful.

Gormley: I would agree. It is not just about price. I agree with Tom Weise that it is a whole package. Price has to be an ingredient, but it's like a person I once knew said: You need quality, schedule, budget, and relationship. I think you have to have all of those. You may have the best price, and you may even have the top quality, but if everybody is mad at you at the end of the job, you won't get invited back. Therefore, a contractor has to be able to hit all those points: quality, cost, schedule, and relationship. Maybe the fifth thing would be meeting the owner's business needs. ■

Departments

MERGERS AND ACQUISITIONS
The 51% Conundrum

We often hear business owners struggle at the 51% ownership level because of the belief that slipping below that magic percentage will result in a loss of control. The reality is that there are simple ways to own less than 51% of a business and still maintain complete control.

To totally grasp this concept, one must first understand the key elements of ownership transfer and the relevance of the 51 % concern. Transferring ownership has at its hub four key aspects, all related but unique:

1. The investment and return of capital
2. The return on invested capital, either through earnings participation and/or growth of the underlying capital
3. The assumption and transfer of risk
4. Voting control and the transfer of it

In every ownership-transfer scenario, these four distinct factors can and should be managed and planned for separately. The heart of the issue with control rests with the fact that an individual only needs 51% of the vote, not the capital, earnings, return, or risk.

THE MECHANICS & ISSUES OF TRANSFERRING CONTROL

Several aspects of the control issue become germane when contemplating the topic:

Who — Will one individual eventually have control and if not, then in what ratio will multiple shareholders share the power? Numerous scenarios exist. This seemingly simple question is loaded with complexity and implications. Theoretically, is it better to have one person with unilateral control or several individuals that share it? There is a trade-off of efficiency vs. democracy, both alternatives having pros and cons. It could simply be one share gets one vote or a more creative and compelling structure fashioned to achieve a different outcome.

When — The timing of transferring control is a crucial part of the control equation. As control can be and frequently is transferred later in the process than the economics or risk, multiple scenarios arise. Issues that typically surface include risk transference, management and leadership succession, and the underlying economics of the entire transaction. Generally, there is an unwillingness to transfer control to the next generation until the current controlling ownership has received the bulk of their value from the business, has minimal capital at risk, and is confident in the next generation's ability to lead and manage the business. When those conditions are satisfied, the transfer of voting control is usually the next item on the table.

Generally, there is an unwillingness to transfer control to the next generation until the current controlling ownership has received the bulk of their value from the business, has minimal capital at risk, and is confident in the next generation's ability to lead and manage the business.

How — The actual mechanics of maintaining control with less than 51% ownership are straightforward but unique, depending on the underlying entity form.

For S-Corporations, voting and non-voting stock is used. Remember, you cannot have multiple classes of stock, but you can have voting and non-voting stock. In a typical scenario, 99% of the stock becomes non-voting and 1% is voting. The large 99% non-voting block is what is transferred or sold over during the process. The remaining 1%, where the control is concentrated, is transferred or sold at the end of the process in a carefully managed and thoughtful fashion.

If a C-Corporation is the existing structure, then voting and non-voting stock is created. Once again, the non-voting stock is sold and transferred over time, while the voting stock is transferred at the end of the process.

If the entity is either a partnership or an LLC, the controlling ownership will maintain control by virtue of being either the managing member of the LLC or the general partner of the partnership.

The true power of this notion is the flexibility to transfer the elements of ownership (capital investment, earnings participation, risk, and future growth) independently and distinctly from one another, while maintaining complete control through the process and having the ability to allocate it in a different way.

LEGAL VS. OPERATIONAL CONTROL

As the departing shareholders become less involved with the business, operational and day-to-day power rests with the current management and leadership. While a retiring, or departing, owner might maintain legal voting control, the ability of the current management team to lead and influence employees has a much greater impact on the long-term success of the business than one's ability to cast a vote. It could be argued that true control at this point rests with the senior managers of the firm. There develops a symbiotic relationship between the departing owner and the control he or she has and that of the next generation that is obtaining ownership and leading the business.

HOW IMPORTANT IS CONTROL FOR THE MINORITY SHAREHOLDER?

Minority shareholders are often overly concerned that their stock be voting. The reality, of course, is that only the individual or individuals that have 51% of the vote will, in fact, have control, and the vote of the minority shareholders matters very little. Similar to owning a few hundred shares of a public company, how they are voted is irrelevant. Once this issue is explained and understood by minority shareholders, the concept of voting stock and having a vote takes a different complexion.

The subject of control is one that is often misunderstood and oversimplified. Like many aspects of ownership transfer, adequate planning and forethought will allow the current ownership great flexibility and the strong likelihood that the desired objectives will be achieved. ■

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MARKETING

TR 5: The Secret of Execution

You sweated and strained for hours, weeks, or perhaps, even months. Finally, the plan is coming together and now it is time to execute it. For most senior leaders, this is a time of great mixed emotions. On one hand, is the excitement around what the future holds. On the other, is the cold dread in the pit of your stomach that you now have to wait to see if the organization will pick up the plan and fully implement it. Partial-plan implementation does not drive the results you need, or worse, the partial implementation only adds costs that are not offset with additional margin, cost savings, or revenue. In the end, the company's cost model is too heavy to compete in the market.

So what is the secret to getting a company excited about change and willing to embrace it? We at FMI hear from our clients that one of the most difficult things they do is to build a culture that supports, embraces, and consistently delivers on plan execution. For small companies and large, for general contractors

For small companies and large, for general contractors and subcontractors, and for senior leaders throughout the organization, no plan is worth the effort unless something is actually done with it.

and subcontractors, and for senior leaders throughout the organization, no plan is worth the effort unless something is actually done with it. There is little or no value unless the plan is put into place.

A concept called TR 5 is the secret behind turning plans and ideas from concept into reality. Employees are already running hard in today's competitive world. Adding to their already overfilled plate is a tough feat. They know that change needs to happen; they just cannot see their way clear to find the time they need to make change a reality. My time with clients is spent helping them find profitable customers, strategizing how to win work, and bringing backlog in the door. To be successful, the effort needs to affect the organization at its core cultural level.

New skills are generally needed. People of all levels need to interface better with customers, create a stronger sense of urgency, and deliver on hot buttons 100% of the time. The new focus requires people in the office and field to find time to apply new strategic initiatives. So how do you get an organization to execute on the plan created? Actually, it is simple.

We have all heard horror stories about companies thinking that they had actually put new ideas into place only to find out what really happened was the organization tried it one time, and then went back to business as usual. When dealing with customers, this creates price pressure on the next project. If you do not deliver on the promises made, customers expect you to cut your price in the future. However, this is not the outcome you want.

Typical implementation generates no permanent skills changes. No new systems are created to encourage or support changed behavior. No organizational resources are applied to the effort. The information that people needed to propel the new plan into permanent action was never requested, let alone received. Then the really challenging part happens — the reward systems (monetary and non-monetary) actually discouraged implementing the new plan ideas.

Traction around company initiatives comes from five basic elements. When combined, they drive new ideas into day-to-day efforts. The five elements are skills, information, responsibilities, resources, and rewards. When these five elements align and support your new initiatives, amazing things happen. The organization builds a buzz about the idea and puts their efforts squarely into implementation. The whole company gets into the act. New plans are implemented. New habits are built, and the changes become a permanent part of the company.

The next time you want to implement a new idea, think about the TR 5 elements:

Want to change the culture of your company? No problem, just incorporate the TR 5 elements and you will get there faster than you thought possible.

1. What new skills are needed if our people are going to fully leverage the potential advantage?
2. What information will be needed to support the people on the front lines of implementation? What information do their supervisors need?
3. How do the responsibilities inside of the company need to be realigned to support the new plan?
4. What resources (i.e., time, money, technology, tools, etc.) are needed to be successful? What are we missing now?
5. What changes are needed in our reward systems (i.e., monetary and non-monetary) to make sure that the "right" behaviors are encouraged and rewarded? How do we recognize the right behavior?

Build your implementation plan around the TR 5 elements. You will invest additional time thinking through the TR 5 elements, but the return on your effort will be substantial.

Want to change the culture of your company? No problem, just incorporate the TR 5 elements and you will get there faster than you thought possible. ■

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Jim Ryan

Quarterly Profile

Profile in Longevity: The Ryan Companies

"My grandfather really believed in service and the customer. He believed in honesty and integrity. That is where our culture comes from today."

__The Ryan Companies__ is a third-generation construction company headquartered in Minneapolis, Minn. The company, which was founded more than 65 years ago as a small northern Minnesota lumber company, is currently headed by third-generation family members __Jim Ryan__ (CEO) and __Pat Ryan__ (President) along with Tim Gray (CFO). Throughout the generations, the style of leadership at Ryan has remained remarkably true to the nature of the family — trustworthy, fair, and entrepreneurial.

Pat Ryan

Ryan has grown and changed to fit the ever-expanding opportunities of the business and the industry. From building a $4,500 house in Hibbing, Minn., to managing multimillion-dollar premier projects around the country for companies like Target Corporation, Deere & Company, Ford Motor Company, Mercy Medical, and U.S. Bancorp, Ryan continues to serve customers in more than 150 cities around the country.

FMI Director __Cynthia Paul__ met with cousins Jim and Pat Ryan to discuss the company, its history, and their success as a family-run business.

Cynthia: Would you give us an overview of the company, how it started, and its history?

Jim: My grandfather bought a lumberyard in 1937 or 1938.

Pat: The year of incorporation was 1938.

Jim: For some reason my grandfather, James (James Henry Ryan, founder), wanted all of his sons to go to Notre Dame, and they all went to Notre Dame. When Fran (the eldest son) graduated, he happened to get a job in Detroit, at Goodyear or one of the tire stores. My grandfather called him up shortly thereafter and wanted to meet him down at Notre Dame for a Southern Cal game. Southern Cal is a big rival, making it a big game at Notre Dame.

Fran said, “I can’t Dad.” “I’m working.” My grandfather (we called him BaPop) said, "I know you are working; it is on a Saturday. I will meet you over there on

He called Fran up and said, "Kid, you come on home and run this lumberyard. If you do a good job, you can go to any football game you want."

Friday night." Fran said, "This is a retail business Dad, and we work on Saturdays." BaPop got quiet for a while. And then he said, "Well tell them Notre Dame's playing Southern Cal. They'll understand that." And Fran said, "They don't care."

Within 60 days of that conversation, grandfather bought the lumberyard. He called Fran up and said, "Kid, you come on home and run this lumberyard. If you do a good job, you can go to any football game you want." Shortly after that, Fran was in the service for the war. He was a naval pilot. My dad (Russ Ryan, the second oldest son) could not go. He had ulcers at the time, and so he came into the business shortly thereafter. Fran is now 91; my dad is 87. I am not sure how involved my grandfather was with the lumberyard. I am sure he started it up and got his sons to understand the business. BaPop knew nothing about lumber or construction, or those materials.

Pat: It started even before that. Our grandfather was born in Michigan. His father had come over from Ireland. He was working in the mines as a driller's assistant making 25 cents a day. A superintendent had promised him the driller's job but then gave it to his son-in-law. Bapop up and quit, saying no SOB is going to treat me like that again. "I am going to run my own business." And that's what he did. Shortly thereafter, he joined his brother, Tom, in the lumber business, and they ultimately split. Our grandfather stayed in the lumber business while Tom went into the transfer business, which evolved into the coal business. People would come to James H. to buy lumber for their houses, and they would ask, "Do you know anybody that can help me design my house?" So he, almost by accident, got into what we today refer to as design-build. He was very much an entrepreneur. He bought a piece of property outside of Hibbing; I do not know how many acres it was.

Jim: I think it was 40.

Pat: It was called Ryan Addition. Well, the housing market fell flat on its face shortly after he bought it. So he said, "Now, what do we do?" Then, he was awarded the garbage contract in Hibbing, and so he opened it up as a landfill.

He bought some pigs, and they grazed in the garbage and the fields. He fattened the hogs up on Ryan Addition, turned around, and had them butchered and sold back to the hotels and the restaurants in Hibbing. He made money doing this while he waited for the housing business to pick up, and eventually it was developed.

Jim: As we talk about it, he was involved in that lumberyard a lot more than I thought. My grandfather really believed in service and the customer. He believed in honesty and integrity. That is where our culture comes from today.

Pat: Grandfather Ryan simply believed that you should be treated the way you want people to treat you. It was inbred in us. It was in our family, and so it was the way of life for the company. He believed in hiring smart people, and he believed in "over servicing" customers. His motto was: "Do it better than anybody else. Then you will develop the relationship." Every part of the basics that we embrace today can be connected back to him.

We were talking this morning about Building Lasting Relationships, which is our mission today.

It goes back to a quote James H. made in the 1940s. He was talking to his people and said, "If you take good care of your customer, your customer will take good care of you." That is our message today; you have to build strong relationships.

National Foods, a chain food store, ended up being the first deal we made, and I understand it was done on the back of a napkin. Jim was in the business at the time.

Jim: National Foods was across the street and down a few blocks. It just happened to be the one that was expanding, and so we received an opportunity to build one. This was our first real commercial project. It was done through a relationship; we designed it through an architect we hired, making it was our first design-build. We got the financing. We built it, and we sold it. We ended up developing a great relationship with this food chain — we ended up doing more than 40 of these stores. From there, we got into food distribution warehouses and that brought us into Minneapolis and other geographic locations. However, my Dad and Fran never planned to move to Minneapolis. They loved Hibbing. They loved hunting and fishing, and they liked the small town. The business continued to evolve and develop from that standpoint.

Grandfather Ryan simply believed that you should be treated the way you want people to treat you. It was inbred in us. It was in our family, and so it was the way of life for the company.

In 1965, I got out of Notre Dame, and I evolved at that point. I really did not know if I wanted to work for Ryan, or if I wanted to go work with somebody else. Our Uncle Ed came into the business. He was the third to join the business, very early on. It did not work out real well at first because there are a lot of strong people in our family. Ed decided he wanted his own show. Then, the year before I graduated, he came back into the business on the premise that he could buy in and that he would go down to Minneapolis to start an office there. It was a natural evolution; it was time for us to broaden our geographic horizons. It was 1963.

Ed was the one that really asked me about working for Ryan. In the back of my head, I was waiting for my dad to ask, but he didn't. I asked him later on, "So weren't you ever going to ask me?" And he said, "Oh, I kind of knew it would come about."

It gave us that focused perspective without intertwining family issues, and I think this is critical to the success of a family business.

I think, looking back, that he was smart enough to know that he did not want me to work directly for him. He wanted me to work for someone else. It is kind of the way you and I feel today, Pat. So I went to work for Ed, and we got along marvelously. We have never had a hard word between us.

He did not know our business very well though. I kind of knew the construction, and so I became deeply immersed in the business. He got involved in the development side. I think one of the biggest assets that he gave us was an outside board. He decided that it was much healthier for us to have a board of directors that included outside people. It is one of the best things that happened to us from a business perspective to strengthen the business and build ongoing relationships. It gave us that focused perspective without intertwining family issues, and I think this is critical to the success of a family business.

Pat: Who were the first outside board members?

Jim: Duane (Dewey) Joseph and Don Dillon. They were the first, acting with my dad, Ed, and John (Pat's dad).

Pat: Jim was talking about National Foods. On one of those early deals, Ed went to Northwestern National Life. We needed financing. He convinced NW&L to do the financing. I don't know if it was debt, equity, or both. That was the first deal that evolved into more than 20 years and more than 50 transactions.

Jim: That really goes back to our philosophy of building relationships.

Pat: Right.

Jim: And the relationships would build on both sides: the customer and the supplier.

Pat: Back in 1961 and 1962, Medtronic was just starting. The founder was a gentleman by the name of Earl Bachen. It started literally out of a garage, and Earl approached Ryan to build the facility. They asked Fran and Russ whether they would take stock in lieu of cash for our profit. It was priced about a buck a share at the time. Fran laments to this day for turning it down. We needed cash to keep the company going. Jim's dad said, "Fran, it might be trading at an equivalent of $1,500 a share today, but as soon as that stock would have hit $2 we would've sold it anyway."

Those two taught us not to take yourself too seriously. Have fun along the way. Laugh at yourself, and laugh at the situation. Humor helps; it is a very good ingredient for the two of us.

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Cynthia: How and when did you become involved with the business?

Pat: Like Jim, I worked as a laborer while I was in college. That has been our philosophy: You must work as a laborer. I did not grow up with the construction company. My dad was in the insurance business. He went to Notre Dame and then to graduate school. Upon graduation, he decided the construction company was not the right place for him.

So I did not grow up ever thinking of construction as a career path. I got out of undergraduate school and was pretty immature, becoming a ski bum for most of one season. After that, I got into the real estate brokerage business, with Coldwell Banker (now CB Richard Ellis). They had just opened up an office in Minneapolis. I was there for seven years.

Jim and I are 11 years apart, and we come from a big family. We have 51-plus cousins. So I did not grow up in his shadow. I was just a little putz cousin — you know — one of many to him.

Jim: There is a different word for that. (laughing)

Pat: Yes, but I'm cleaning it up. As a real-estate broker, we started doing some business together. Jim really was pretty much in the operational capacity in Minneapolis, running the show. Weren't you?

Jim: Yeah.

Pat: He (Jim) wanted to take the company to the next level and so got into office-building development. I represented the landowner in this park, and we worked to put together a multi-tenant office building. Ryan developed it, and I was the broker. Over a period of three or five years that evolved into a 750,000-square foot business park. During that period, we realized that we had very good karma between us. We were very different in terms of our approaches. But probably more important was during that period, our wives became very good friends and remain so. They would consider themselves sisters, which is an important ingredient in our success.

After working as a broker for seven years, I was thinking of taking another job somewhere. I had what they call the seven-year itch. Then, Jim and I had lunch one day. I wanted to get some advice from Jim because I was planning to move out of the Twin Cities. And he said, "Well, have you ever thought about coming to work for us?" I said, "Not really. I have a big enough ego that I do not want to go to work for a company that has my last name on it, and I'm not an owner." He said, "Well if it works out, I will make you a partner." I thought about it, and I had my mind made up by the time I got back to the office. We had not discussed any details at all. I got home that night and Ann said, "Pat, I'm pregnant with our third child." And I said, "Well that's great because I just decided to quit my job."

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Jim: Before Pat became involved, our company was not doing any spec development. We were doing single-tenant development, but we wouldn't build an office building without all the tenants in place. Pat had quickly become the No. 1 office guy at Coldwell Banker, and he really came in and showed us that we could make a fair amount of money in the development world as well as showing us that we could manage the risk. To his credit, Pat really got us involved in the development business in a much more significant way.

Cynthia: What has been the biggest surprise working for a family-run business?

Jim: I do not think there have been any surprises, at least for me. It was just a way of life. The thing that I always knew growing up was that my dad and my Uncle Fran got along extremely well. They never argued about anything; they would always come to consensus. Their relationship was much more important than the money.

There have been different times in the business, when one or the other needed cash. A couple of my brothers had cancer, and they were not covered completely by insurance. It was a significant financial drain. Yet, there was never an issue of money. It really is an amazing relationship between the two of them. I have never seen them argue about anything.

That philosophy exists today. They still come down every other month for board meetings. And we talk about the value of our stock, and they still own shares in the company. Their focus and motivation is to keep the value of the shares as low as reasonably possible so that it can perpetuate the company. It is a philosophy that has become ingrained in us.

The organization is more important than any individual. That philosophy has been invaluable. Pat and I have been working together for 23 years now. We have never once argued or debated about the money. I mean we challenge each other on a lot of business fronts, and that's very healthy.

Cynthia: Can you share an example of how your family worked together?

Jim: The best example of that is Ed Ryan. After 10 years, he decided he wanted to go back to Grand Rapids where everybody knew him. He missed the Northwoods. So he went to Fran and asked to be bought

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out. They sat and talked, and Fran asked him, “Are you sure that’s what you want?” Ed said, “Yes.” So Fran said, “Well, come up with a fair price.”

He came up with a number that I knew as I looked at it, was more than the value of a third of the company. I did not say anything; it was not my place. About a week later, I happened to be home with my dad. I asked my dad, “Are you going to make that deal with Ed?” He said, “Sure.” I replied, “Boy, that number doesn’t feel right.” And Dad said, “Well, it’s not; it’s more than it should be.” I said, “Well, you’re still going to do it?” He said, “He’s my brother; of course, we’re going to do it.” The money just did not stack up. I mean there was no comparison between that and the relationship.

Cynthia: So what does it take for the two of you to work together? How have you made that work over the years?

Jim: It has not been effort. I mean we have worked the same way. We have gotten along well. As Pat said, our wives are very close. I gravitated more into the construction because that is what I was doing. Pat was the one that brought the development in, and although we cross all over the place and sometimes it can be difficult to communicate, those are the two arenas that we come from at 50,000 feet.

Cynthia: How do you make sure the lines of communication remain open between the two of you?

Jim: We try to meet once a week, off-site, for breakfast, and talk about the things that are important. Pat instituted this on the communications side. We keep a list, and we will tick things off. It is a list of priority items. I really think that has been invaluable, and we try not to miss that weekly meeting.

Cynthia: So it is just the two of you that meet once a week?

Jim: Well actually, we did not talk about Tim Gray entering. Tim Gray, our CFO and partner, is also at the meeting. Tim was my roommate at Notre Dame. Tim was always a wiz at math and accounting. I was terrible at accounting, and so through school he would help me on my accounting. We had a great friendship and relationship.

He ended up getting married while he was still in school. When I got into the business our accounting was done up in Hibbing, and it was really antiquated. One night I came home, and I told my dad, "You know, if you waited for Jerry to tell you if we made any money on our last job, it would probably take him about a year and a half. He's just not any good; he's not doing us a just service." My dad looked at me, and he said, "Then get somebody else." So I went to the phone and I tracked down Tim Gray, who was working for Geno Palucci at the time, down in North Carolina. I said, "Tim you want to come back home and work for us?" Tim said, "Where?" I said, "Well, you have to go to Hibbing for just a little bit." He said, "The only way I'm coming is if I only have to stay in Hibbing for three years."

He did not want to come back into a small-town environment. So he came to Hibbing and planned to stay for three years. He ended up staying there for more than 20 years — Pat and I could not pull him out of there. Finally, we had to have him so he moved to the Cities; but he fell in love with Hibbing. That was 1985.

So Tim became the first non-family partner, but he is like family. It goes down the same way between us. We get along the same way. So the three of us sit in those meetings.

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Cynthia: Can you give us a couple situations that illustrate the philosophy of the company?

Pat: We were talking about defining moments in the company, which shaped our people's behavior and ultimately, our culture. That discussion caused us to look at our mission statement.

Up until then, we had a standard marketing mission statement that did not mean a whole lot: We would be the best in the industry at doing what we did. But as we wrestled with it and looked forward, we could not come up with anything that made sense.

It was not until we looked back at our history and our culture that we were really able to verbalize for the first time that for us it was about building relationships over time with not only customers, suppliers, investors etc., but with our people — that's what makes a difference.

For us in the family it was inert and built-in, but it was not real to our people unless they had been with us for a long time and could watch how we act. So we were able to label that philosophy and talk about it openly. And it is right on: Building Lasting Relationships.

I am going to draw from one example that we reference a lot — and that is a National Food store on Bloomington Avenue in Minneapolis. It was one of the very early National Food stores that the company was building back in the mid 1960s. We had just completed the building, and the foundations began to sink. The company decided to build a new store adjacent to the existing facility at the company's cost. The relationship was just too important to let money stand in the way. It almost bankrupted the company. The first building was eventually leased out to another retailer after it stabilized.

Jim: Another defining moment for the company was a tragic accident at the Piper Tower in downtown Minneapolis. A steel girder let loose, knocking over a large toolbox, and ended up crushing two electricians. It was a real tragedy that touched everybody in the company.

It was defining in the sense that I think everybody in the company understood how personally involved Jim, Tim, and I are in the health of our workforce. We immediately focused on the survivors and got them psychological and spiritual help.

We focused on the families and got personally involved in communicating the tragedy and communicating responsibility. We very quickly communicated to the press what we did know and what we did not know. Our purpose was to make sure that the wrong people were not accused of making mistakes. We had a memorial service at St. Olaf Church (two blocks from the accident) that involved the entire team, more than 200 people. We had a follow-up service at the site a year later with representatives of the deceased's family in attendance. I think that communicated the true nature of what we hold dear as family in our culture.

Cynthia: How are you able to keep close family ties with each other outside of work? Do your business interactions strain those relationships?

Pat: When I first joined the company, we talked about being careful about what conversations to include our spouses in because it is not fair to include them on certain aspects of the business without them having the benefit of the broader view of the business.

We made an intentional decision not to talk about business or ownership issues with our spouses. Now, if they ask, we don't hide anything, but they are busy raising our families and being involved with the community. And thank the good Lord, they are good friends ... you do not want any divisiveness to ever enter into the multiple levels of relationships among the three of us and our spouses.

To illustrate: about five years ago, we sold a group of shopping centers. It was a big deal, and it hit the papers. Well, I came home and Ann asked, "Is the business in trouble?" I said, "What?" She said, "Well, you're selling all your real estate." Then, I had to explain to her that that was a "healthy" part of our business.

The most valuable thing is having an outside board of directors in a privately owned company, understanding what role you need filled on that board, and then finding the best people to do it. Right now, we are nearly evenly split with inside and outside directors. And you want to make sure you get directors that are not bashful. We have done a very good job finding those.

Cynthia: What advice would you give to those starting a business relationship in a family context?

Pat: We have had the pleasure in our relationship that we were not forced on one another. I was not forced on Jim, nor he on me. And, obviously with Tim, it was not forced. And because of that, we picked our partners. Most family businesses do not have that opportunity. When you pick your partner and are responsible for your decisions, you work a lot harder to make sure they work.

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I think another ingredient that has been really important is a decision we made early on to keep the common stock, or the voting stock, in the hands of those people that are running the company. We had other siblings that were involved, that started to get shares of common stock. We looked at it and decided that was unhealthy. So we made a move that put the common stock and the ownership into the hands of the people that were running the company, and we have made that a rule going forward.

Cynthia: Both of you have rather large families. Are any of your kids interested in coming into the business? How do you handle it?

Jim: Our families are very similar in age. I have eight children, and Pat has five. The last five are close in age, and we have developed extremely close relationships. It really delighted us to see those develop, and they happened purely on an individual basis. So not only do we get along fine, and our wives get along great, but our kids get along equally well.

One of the rules that we set up was that our children, if they had a desire to come into the business, needed to have a talent that we needed. And they needed to work outside the company first for a minimum of three years.

Pat: Presently, Jim has one child, Molly (his oldest daughter), in the business. She has been with us for three years now, and is in retail development. She's doing a fine job. Before that happened, we sat down and looked at the future, and tried to set some rules between the three of us that would make us comfortable, and be in the best interest of ourselves, the business, and our children. We called this "Project Oceanview."

Cynthia: How will you avoid extreme stresses on family relationships with the influx of the next generation into either ownership or employee roles within the business?

Pat: One of the rules that we set up was that our children, if they had a desire to come into the business, needed to have a talent that we needed. And they needed to work outside the company first, for a minimum of three years. We wanted them to make their own minds up prior to coming into the business. We felt that they would be more mature and make the decision that they, in fact, wanted to be in the company business, as opposed to just being put into the wrong slot and later finding out, for some reason, that it didn't work.

No child will work for his or her father. Jim and I made the decision that if one of his kids comes into the business, I will mentor his, and vice versa. And we worked on creating this plan for about a year.

Our kids are friends. So we decided that we were going to present "Project Oceanview" to them on a Thanksgiving weekend at the same time. Jim's kids were grown and had selected different professions already, and mine were younger. I think the reactions of the two families were pretty much the same.

The older kids were more interested in seeing their friends or getting to the party. And the younger kids did not have a clue about what we were talking. So I had about five minutes of attention, and I think you had about the same, Jim. I mean, it was deflating.

I think we are a company in very good shape right now and postured very well for smart growth.

Seriously, we wordsmithed this thing from February, when it was originally crafted, to November, when we presented it to our children. Everything was quiet after that; we received no comments from our children. Then in January, Jim's oldest daughter, Molly, calls him up. She was successfully working in an advertising agency at the time, and she said, "Dad, I've been thinking about coming into the business, and I decided that if I do it, I'd better do it now. I want to talk to you about joining Ryan." Jim hung up the phone and took a deep sigh. He was enthusiastic, but he knew that the chemistry among us was going to change. It wasn't that we were afraid of it, but it was an unknown. So that March was the beginning. Thankfully, Lloyd Sigel (an outside director) got us thinking about it then. I do not push the kids at all about coming into the business. I never bring it up. My guess is that's the same with you, Jim. This planning that we did allowed the door that Molly needed opened to be open so that she could walk through it.

Jim: I think one of the most important pieces of advice, from our standpoint, is understanding that the family is much more important than the business or the dollars that the business might generate. And if you focus on the relationships and make those paramount then the dollars kind of pale, and it tends to answer all of those questions automatically.

Cynthia: What does the future hold for Ryan Companies in the next five to 10 years?

Pat: It is a timely question because we are just coming back from rolling out our strategic plan for the offices. I think we are a company in very good shape right now and postured very well for smart growth. Why do I say that? We manage our business that way because we are in the development business; we are in the design and construction business, and we are in the properties business. I do not know if it just happened or what, but we said we never want to do more than 50% self-development work.

The other 50% we want to perform with third-party customers. The balance allows us to be in a competitive environment while not becoming too incestuous.

We have held true to that. Depending on the cycle, it will swing to a 60/40 balance. But 60/40 is our tolerance point now, where at one point in time it was 80/20. That was back in the 1980s.

Second, we have had very good regional expansion into Phoenix, Chicago, and Iowa. We have made the head of those offices partners in the sense that they are essentially running pretty big companies. We give them a lot of latitude to make a lot of the decisions. We get involved, primarily, in capital decisions and in strategic issues. After that, we are trying to allow them to have as much autonomy as possible.

Growth for us in Phoenix, Iowa, and Chicago has been unbelievable. So you are going to see more of that, but in a very methodical way. It is going to be methodical in the sense that you cannot transport culture.

We have talked a lot about culture. Any office we open is going to have a handful, say three to five people that have been with Ryan for at least three years, and they are going to form the nucleus of a team that will go into the new market.

We are only going to go into a new market that a customer takes us into and that has growth potential. We have a real product with real Ryan people, and then that becomes the nucleus for organic growth in that market. We do not want to be the biggest design-builder in the country. We only want to be the best. So we work on little things all the time. I think the future is very bright.

Jim: Just to supplement that: We believe in people. We try to hire the best. We focus not only on their intelligence and expertise, but we look for a real cultural match. We want people who can carry our banners. That is critically important to us.

As important as that culture is, it drives back to my grandfather. He was the driving force for many years to my dad, Russell Ryan, and Fran Ryan, our uncle. It is a way of life. It is a way of living. It is a moral value. It is an ethical standard. It defines a set of characteristics at a very high level, and those characteristics define the way we run our business.

We have taken that culture and simply brought that forward. It creates a very trusting environment. The other thing that Russell and Fran brought forward is our focus on the customer. That focus we continue today. It is not only that we know customers are important; we service them better than anyone else. It is the "service plus one" concept. We survey every job that we do, big or small, and we talk with our customers upfront about what is important to them. Then, we tailor the service to these items.

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What we are after is a raving fan; our mission is building lasting relationships. The vision is to be the builder of choice.

We continue to develop those strong relationships and make sure that we are monitoring that carefully. Our growth has come, and will continue to come, from that direction. Our repeat business is at a level that approaches 80% on a consistent basis, and that includes the new business that we are generating. ■

Building Human Relations for a Successful Tomorrow

The demographic makeup of the construction workforce is rapidly changing. It is critical for construction firms to embrace diversity management in their strategic business plans.

By Kelley Chisholm and Ashley Robertson

Today's construction industry looks much different than it did 20 years ago. The construction workforce at that time was predominately comprised of white males, with African-American males making up the largest minority. Women in the industry were certainly a rarity, and to some extent, still are.

Two decades ago, you didn't see people on construction sites looking up words and phrases in a Spanish-language dictionary, such as Constructionary-Construccionario, which is specific to the construction industry and contains more than 1,000 construction terms and phrases. More than likely, you weren't as concerned about teaching safety on the jobsite to workers who did not understand English; it just wasn't an issue. Twenty years ago, you didn't see people talking on cell phones or using a BlackBerry to check their e-mail, voicemail, and to schedule appointments on their PDA. Laser technology was in its infancy. Communicating with people in different parts of the world took much more effort and planning than it does today. Needless to say, you and your employees were not attending programs on diversity either, and in fact, you may not have even heard of such a thing. Welcome to the 21st century.

The demographic makeup of the construction workforce is rapidly changing and will continue to evolve drastically in the coming decades. Globalization, changes in the economy, and constant advances in technology all impact the workplace, making it imperative for construction firms to include and embrace diversity management in their strategic business plans.

Generation Definitions

G.I. Generation: 1901–1924
Silent Generation: 1925–1944
Baby Boomers: 1945–1961
Generation X: 1962–1977
Generation Y: 1978–present

THE WORKFORCE DILEMMA

Diversity is a serious business issue that impacts profitability. Embracing diversity fosters productive teamwork, and research validates that differences in perspectives enable teams to successfully reach their goals. When project teams are functioning effectively, the likely result is improved productivity and profits. Construction firms across the nation have the opportunity to proactively recruit and develop different types of employees at all levels throughout their firms.

According to the Bureau of Labor Statistics, the number of U.S. workers will expand from 141 million in 2000 to 155 million by 2008, and the working population between the ages of 45 and 64 will grow faster than that of any other age group. The simultaneous decline in births during the late 1960s and early 1970s means the number of younger workers isn't keeping up, and it will be nearly impossible to replace all of the soon-to-be retiring baby boomers. Baby boomers outnumber Generation X by approximately 30 million people and account for the largest part of the population in the United States. And while Generation Y is beginning to catch up, there simply are not enough Generation X workers to take on the leadership roles of their predecessors.

Consider for a moment that for the next 10 years, a baby boomer will turn 50 every 7.5 seconds. With that said, if you don't tap into the next generation of leaders (Generation X), your company will have to completely rely on the aging baby boomers for the future leadership, many of whom have their sights on retirement. Generation X consists of approximately 58 million Americans born between 1962 and 1977, and while they have been unfairly named Generation X (suggesting that they are a generation with no character), they are the most educated generation in the country. There are a number of advantages to preparing these individuals for leadership roles, but the point remains that you don't have the option of thinking about the advantages or disadvantages of using a Generation Xer; there just isn't enough time. And because there is an increasing amount of Generation Y workers entering the workforce, it is a good idea for the future of your company to spend some time developing the management and leadership skills of these young workers.

Embracing diversity fosters productive teamwork, and research validates that differences in perspectives enable teams to successfully reach their goals.

These statistics point to the reality that diversity is and will be a major issue for most managers. The old ethnic paradigm of white and black labor has expanded, and we can anticipate that by 2050, minorities will make up nearly half of the nation's population. Workplace demographics will shift dramatically as the number of Hispanic, African-American, and Asian residents continues to expand. The construction industry, in particular, is going to have to get more creative about attracting and embracing diversity, not only across generational and ethnic lines, but also among gender lines. More women and minorities must be actively recruited into the industry now in order to fill the gap left behind by a retiring white male workforce as well as to compete with other industries and professions for talented individuals. One example of this is currently happening in Canada, where employers are going to Mexico to recruit job candidates to work in construction and other industries. President Bush has proposed a similar program for the United States.[1]

The construction industry, in particular, is going to have to get more creative about attracting and embracing diversity, not only across generational and ethnic lines, but also among gender lines.

The construction industry is certainly affected by these workforce changes and trends. According to a recent article in *Construction Executive Magazine*,[2] the industry is currently facing a shortage of employees and needs to replace 250,000 workers every year just to keep up with demand. Some construction companies wisely anticipated these changes in the workforce and have already implemented successful diversity initiatives. Others in the industry, including owners, general contractors, subcontractors, and manufacturers/distributors are now beginning to realize that diversity is not just a temporary buzzword or a fad. They are starting to seriously explore what implications a diverse workforce will have for their businesses and how to position themselves as a workplace of diverse opportunities. Companies must also get actively involved in local schools to change students' perception that the construction industry is dirty work for poor performers; thus, paving the way for the future success of the construction industry. Research indicates that a good diversity plan integrated into a company's business plan will usually add market share to the organization. Companies who continue to ignore diversity do so at their own risk.

DIVERSITY DEFINED

Diversity is purely a reflection of demographics and human behavior. The American Society of Training and Development (ASTD)[3] defines diversity as "a mosaic of people who bring a variety of backgrounds, styles, perspectives, values, and beliefs as assets to the groups and organizations with which they interact." Simply put, diversity is about differences and respect for those differences. Diversity differs from discrimination and affirmative action in that it addresses an organization's culture and is not strictly focused on legal issues.

There are many myths that surround diversity that should be dispelled in order to implement a successful diversity initiative in an organization. Some of these myths include the following:

- **Myth 1:** Diversity is just about race and gender. **Truth:** Diversity is much broader and includes internal employees as well as external customers.
- **Myth 2:** Diversity is another version of Equal Employment Opportunity (EEO) and Affirmative Action. **Truth:** EEO and Affirmative Action have their role in the evolution of the diversity movement today, but they are distinctly different from valuing diversity. EEO/Affirmative Action are laws initiated by the government and imposed on people. They are legally driven and usually reactive by nature. On the other hand, diversity initiatives are voluntary, opportunity focused, company driven, and proactive.
- **Myth 3:** Diversity is exclusive. **Truth:** Diversity is inclusive — it's about all of us, not just about "them." It is about creating a culture where each individual can thrive and be productive.
- **Myth 4:** Diversity is about "white male bashing." **Truth:** Historically, the American workplace was created and managed by white males and based on similar backgrounds and belief systems. Things are different today, and changes must to be made to take into account everyone's needs. However, it is unfair to blame any group for the past. The past is the past, and blaming any particular group only undermines any diversity efforts.
- **Myth 5:** Diversity is just another fad. **Truth:** Diversity is not a "flavor of the month." It is here to stay, and is never going to disappear. Statistics show that our increasingly diverse and global marketplace has no signs of fading, and in fact will continue to grow.

LOOK INTO THE CRYSTAL BALL

Looking across construction sites and offices across the country, you will observe a mixture of colors, races, ages, abilities, lifestyles, and values. Clearly, predictions from *Workforce 2000*,[4] a study commissioned by the U.S. Department of Labor in 1987, have become reality. The commission predicted that between 1987 and 1995, the employed labor force would increase by 13 million, and females would account for two million more of the new workers than males. Women and minorities have indeed made most of the net gains in employment during that time period, and this trend is expected to continue indefinitely. *Workforce 2020* and *Beyond Workforce 2020*, follow-ups to the original study, also make predictions for the future of the U.S. workforce. To access *Workforce 2020* visit this website: http://irlcjr.hudson.org/files/publications/workforce_international_mkt_labor.pdf

Some Recent Developments

The National Association of Women in Construction (http://www.nawic.org/), whose core purpose is to enhance the success of women in the construction industry, has done some interesting research on women in construction. They discovered that between 1995–2001, the number of women in construction increased 22% from 762,000 to 934,000. The breakdown of those women by employment sector is as follows:

- Technical, Sales, and Administrative Support: 413,000 or 44.2%
- Managerial and Professional Specialty: 322,000 or 34.5%
- Precision, Production, and Craft: 129,000 or 13.8%
- Operators, Fabricators, and Laborers: 59,000 or 6.3%
- Service, Farming, Forestry, and Fishing: 12,000 or 1.2%

Growth of Women in Construction in the U.S.:

- 1993 — 617,000
- 1995 — 762,000
- 1998 — 797,000
- 1999 — 886,000
- 2000 — 913,000
- 2001 — 934,000

OSHA and the Hispanic Contractors of America Inc. (HCA) formed an alliance in 2002 to promote safe and healthful working conditions for Hispanic construction workers. The Alliance focuses on helping Hispanic construction contractors (employers) reduce the number of Hispanic construction workers injured or killed by work-related accidents through improving their knowledge of safe and healthful work practices and achieving compliance with safety and health standards and other regulations. The outreach and communication goals of the Alliance include:

- Develop new resources, in Spanish, for employers and employees such as safety and health publications, audiovisuals, and other reference materials.
- Exhibit and disseminate safety and health information at conferences, events, community-based activities, and through electronic mediums.
- Work with community and faith-based organizations and other leadership groups to build safety and health awareness within the Hispanic community.
- Encourage bilingual individuals in construction to take the OSHA train-the-trainer course so they are qualified to teach Hispanic workers the OSHA 10- and 30-hour construction safety and health outreach courses in Spanish.
- Promote and encourage participation in OSHA's cooperative programs among HCA members.

The Hispanic Contractors of America web site may be accessed at: http://www.osha.gov/dcsp/alliances/hca/hca.html

Diversity is about values. It has to do with human rights, civil rights, and an individual's deeply held beliefs. It is a balance between people's rights to their personal beliefs and an organization's rights to create a productive, diverse workplace. Diversity is about behaviors. Valuing diversity is much more productive than not valuing it, and can have a direct impact on a company's bottom line. Diversity is a long-term process. It cannot be addressed by a single workshop or a few days of training. It must be an integral part of all other business efforts, and be actively promoted by all top-level executives in the company.

WHAT MAKES YOU DIFFERENT?

Much of the research that addresses diversity incorporates the idea that there are "primary" and "secondary" dimensions of diversity, which were introduced by Marilyn Loden in her book *Implementing Diversity* in 1996. Primary dimensions of diversity include age, race, ethnicity, sexual orientation, physical qualities, and gender. Primary dimensions are aspects of ourselves we cannot change because we are born with them. Primary dimensions are physically visible; they are things people can tell just by looking at us, with the exception of sexual orientation. These six differences are termed core dimensions of diversity because they exert an important impression on our early socialization and have a powerful, sustained impact on our experiences and values throughout every stage of life. All individuals have a variety of diversity dimensions through which they experience the world. When people feel they are being stereotyped based on a primary dimension, they can be very sensitive about it, and usually much more so than if it were a secondary dimension.

Secondary dimensions of diversity include, but are not limited to, one's work background, geographical location, marital status, military experience, religious beliefs, education, parental status, income, personal habits, hobbies etc. Secondary dimensions are elements that we have some power to control and can change throughout our lives. Because we acquire, discard, and/or modify many of these secondary dimensions, their influence in our lives is less constant and more individualized than is true for the core dimensions. Nonetheless, these secondary dimensions add richness and complexity to our diverse identities and give meaning to our everyday lives. People are usually less sensitive about secondary dimensions because these are things that they have some power to change. People also have the choice of whether or not to disclose any of this information; it can be concealed.

Discrimination is not the same as diversity even though both are important, and leaders in construction companies should recognize and understand both.

DIVERSITY VS. DISCRIMINATION

Discrimination is not the same as diversity even though both are important, and leaders in construction companies should recognize and understand both. Discrimination from an employment perspective is treating one person differently than another based solely on personal characteristics. Discrimination is illegal in the workplace and occurs when a person is treated unfavorably on the basis of category, class, or group rather than being treated fairly and equitably on the basis of merit. The basic federal law against job discrimination is Title VII of the Civil Rights Act of 1964. Under this law, it is illegal for an employer to discriminate on the basis of race, color, national origin, sex, age, religion, or disability. Employers must understand and adhere to the following federal acts in order to avoid serious implications to their businesses, especially in the form of lawsuits:

- **Title VII of the Civil Rights act of 1964** prohibits employment discrimination based on race, color, religion, sex, and national origin.
- **The Age Discrimination in Employment Act (ADEA) of 1967** protects employees 40 years and older in age.
- **The American Disabilities Act (ADA) of 1990** bans employment discrimination against qualified individuals with disabilities.

Sexual harassment accounts for a large number of employment-related law suits. Sexual harassment is a form of discrimination that violates Title VII of the Civil Rights Act of 1964, and can take the following forms:

- **Quid pro quo harassment,** which is when an employee is forced to choose between submission to a superior's sexual demands and forfeiting an employment benefit, such as a raise or continued employment.
- **Hostile environment,** which is defined by the EEOC as an "interference with the employee's work behavior or a creation of an offensive work environment."
- **Sexual favoritism,** whereby an employee is granted a promotion, raise, or some other type of reward because of submission to requests from a supervisor. When favoritism occurs, other employees are thereby denied a chance at the promotion or reward.
- **Harassment by non-employees,** where employers can be liable for sexual harassment of employees by outsiders if the employer has some degree of control to stop the improper behavior.
- **Same-sex harassment,** where harassment can occur between people of the same gender.

Employers must be aware that sexual conduct is unwelcome when acceptance or rejection of the conduct is used to make employment decisions that affect the person claiming harassment. This type of conduct has the effect of unreasonably interfering with the victim's job performance and can contribute to the creation of an intimidating or hostile work environment. Prevention is the best means to eliminate sexual harassment in an organization. Employers should be proactive and prevent sexual harassment from occurring by communicating that it will not be tolerated at the workplace by providing training about sexual harassment to all employees, by establishing an effective grievance process, and by taking instant and appropriate action when an employee makes a complaint. A company must make sure it does not unconsciously promote an offensive atmosphere through jokes or thoughtless remarks.

Harassment based on race, sex, religion, color, national origin, or disability must be avoided at all costs. No one wants to work in an environment where employees feel demeaned and degraded. This is not only illegal, but also unproductive and can seriously affect morale. Education on harassment issues is extremely important not merely because it may avoid future lawsuits, but because all employees deserve to work in an environment free of harassment based on personal characteristics such as race or sex.

Diversity plans that are tied directly to a company's strategic business plans have a much better chance of succeeding than those that are not.

EMBRACING A DIVERSITY PLAN — BRINGING EVERYONE ON BOARD

Many construction companies have some supervisors and workers who are resistant to further diversification of the company's workforce and simply want to avoid the issue entirely and preserve the status quo. How does one get these resisters on board and sell diversity within the company in order to create a richer potential for problem solving, seizing market opportunities, and improving internal communications? What are the benefits a company can reap by integrating diversity into its culture? In order for any diversity plan to succeed, a number of things must happen.

Start with total buy-in and complete commitment.

It is imperative that any diversity plan a company decides to adopt starts with total buy-in and complete commitment from the people at the top levels of the organization, starting with the CEO. Without this support, any efforts will more than likely fail. High-level executives must also support the long-term goal of cultural change. It is not going to happen overnight. Commitment is also needed in terms of time, money, and emotional energy. There is not an end-point in sight — diversity is an ongoing process, and it must be seen as a top-priority issue.

Link diversity to the organization's strategic goals.

Diversity plans that are tied directly to a company's strategic business plans have a much better chance of succeeding than those that are not. If diversity is to be seen as truly valued by the organization, it should be integrated in the company's mission statement, which should be precise, inclusive, and widely communicated and understood by all employees. Linking diversity to the organization's strategic goals shows commitment from the top.

Use outside professional facilitators.

A diversity team should be formed at the onset of any initiative and should include employees from all levels of the organization. Human resources personnel should be actively involved, but ultimately the entire effort needs to be led and championed by top executives. Using outside, experienced consultants and facilitators, at least in the beginning to help initiate and implement the process, is highly recommended. Many diversity plans, however well-intentioned, fail for a number of reasons, such as not having specific or realistic goals, lack of top-management support, or not measuring and evaluating the activities and climate on a regular basis. In addition, most employees are resistant to change, and diversity programs can invoke numerous fears in the early stages of implementation. By using outside professional facilitators who are familiar with the initial resistance encountered in establishing a diversity plan for a company, many problems can be worked through more quickly as they know what to expect and how to handle certain situations.

Obtain buy-in from all levels.

Help individual employees see the big picture. It is crucial that the organization encourages openness and trust, and that all employees feel valued. Employees from all levels throughout the organization should be included in the very early stages of diversity planning.

Encourage continuous learning.

While training is not the only factor in creating a successful diversity program, it is a very important part of the process. Programs must be very carefully planned, as many of the topics that arise during diversity training can be extremely sensitive to some employees. Experienced facilitators should be used whenever possible. One way to promote learning for employees whose native language is not English is by offering English as a Second Language (ESL) classes. Between 2000 and 2050, the Hispanic population of the United States is projected to triple in number, and is one of the fastest growing segments of the U.S. population. Growing nearly 40% in the past 10 years alone, the number of persons of Hispanic origin is expected to triple in the first half of the 21st century, nearing 100 million persons in 2050, which will be almost 25% of the U.S. population. The Asian population is also projected to grow rapidly as well, to 7% of the U.S. population between 2000 and 2050, and much of that growth will result from increased immigration. Offering ESL classes is a great indication of how an organization values its employees by wanting to break down language barriers and improve overall communication skills. In the reverse, those whose first language is English could also take the opportunity to learn Spanish in order to better communicate with Hispanic workers.

Make diversity part of individual performance appraisals.

This helps to build accountability into the process, as well as showing organizational commitment. The organization must stimulate personal development. Acknowledge differences, but focus on behaviors and skills that are needed to get the job done.

Recognize that diversity is not only about differences, but also about flexibility.

Employees who are offered flexible benefits, flexible scheduling, and an equitable balance between their work and personal lives are more likely to have higher morale, greater productivity, and stay with the company longer.

Effective communication is the key to it all!

Management must formally communicate all diversity plans and activities, if the effort is to achieve its intended goals. Timely and accurate information reported to all employees not only helps with buy-in, but it also helps to reduce any rumor mills that the lack of communication or misinformation can bring about.

BENEFITS OF IMPLEMENTING A DIVERSITY PLAN

Some of the benefits of instituting a diversity plan include the following:

Keeping and/or gaining market share

Building positive relationships with both employees and customers enhances marketing efforts and creates a positive, constructive public image with a record of support on diversity issues.

Employee retention

Employees who feel that their work environment is not welcoming are eventually going to leave, or even worse they will stay, become unproductive, and lower the morale of other employees. Recruitment and training of new employees is very expensive, and constant turnover is very costly to a company's bottom line. By valuing diversity and creating a welcoming work environment, employees will want to stay.

Increased productivity and profitability

Higher levels of productivity can be encouraged through individually based motivators and effective group behavior practices that promote collaboration and the sharing of ideas. Diversity helps to foster teamwork, which in turn, increases productivity and profits. Differences in perspectives can often lead to team success. If employees feel valued and respected, overall morale rises, which usually translates into increased productivity.

Reduced legal costs

Six- and seven-figure damage awards are becoming more common when employers do not comply with employment laws. It simply does not make good business sense not to be aware of these laws and ensure that the workplace is discrimination and harassment free.

Improved customer service

Communicating with customers to provide exceptional service is often a challenge, as is working with a diverse range of customers. Improving an organization's cultural climate can build awareness, communication, and skills to better serve all customers, and help to eliminate challenges and barriers related to diversity. The payoffs include keeping customers loyal and strengthening profits and good will.

Increased safety practices

A top challenge in the construction industry is language barriers, which reflects the increase of non-English employees in the workforce. Every employer has a duty to provide a safe working environment for all employees, and communication is the basic tool for informing the employee of safe practices as well as enforcing them. According to various press reports, many of the work-related deaths of Hispanics stem from an inability to speak English and therefore not understanding verbal or written warnings. If parts of a company's diversity efforts include hiring bilingual staff and/or providing ESL classes, safety practices may be improved, resulting in a reduction of accidents and deaths on the jobsite.

TAKING THE PLUNGE — WHAT'S NEXT?

Once a company has decided that it is far more beneficial to embrace diversity than not to, and has obtained buy-in from all top-level executives, what happens next? As mentioned previously, forming a diversity committee that includes employees from all levels of the organization is an excellent starting point. The person leading this committee should be someone high in the organization who is well respected and liked, and who is truly committed to implementing diversity and will make the time to do so. Outside consultants with diversity experience should be used from the start to help guide and facilitate the process, and act as resources as needed. The next steps depend on each individual organization, and should at least include diversity strategy design, communication plans, diversity training and education opportunities, plans on applying diversity awareness and skills in the workplace, and measurement of diversity initiatives, especially for return-on-investment purposes. Specific activities at the beginning of the process may include conducting climate surveys, formulating equity and development policies, revising current business policies to comply with legislation, implementing non-discriminatory recruitment procedures and techniques, and implementing equity-based development for all employees.

A company that values diversity reflects today's changing world and marketplace. Diverse work teams bring high value to organizations. Respecting individual differences will benefit the workplace by creating a competitive edge and increasing work productivity. An organization that values diversity creates a fair, safe, and legal environment where everyone has access to opportunities and challenges. ■

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[1] WorkforceWeek, *5 (24), 2004.*

[2] *Spillane, Jennifer (2004). The perfect storm in the construction industry.* Construction Executive Magazine. *Retrieved from: http://www.abc.org/wmspage.cfm?parm1=2758 on June 30, 2004.*

[3] *Rasmussen, Tina (1996).* The ASTD Trainer's Sourcebook: Diversity. *New York: McGraw-Hill, p. 8.*

[4] Workforce 2000. *Hudson Institute, 1987.*

Finding Your Sweet Spot

This article presents a template for conducting a completed-contracts analysis on your work history; the results can help you find your sweet spot.

By Eric Sanderson

One of the biggest challenges to a contractor lies in identifying what they do best. Many contractors' sole strategy is bidding work that is currently available or indiscriminately chasing work in particular geographic markets. Thus, contractors often pursue work outside their area of expertise.

It is not unusual for contractors to bid work of a type at which they consistently lose money — whether they can actually perform the work well. This lack of consistent performance also applies to the owner, contract, and even key people assigned to a project.

To identify true competitive advantage, contractors must determine what they do best, for whom, and how this work is best delivered. This is the "sweet spot," the area of expertise that should be targeted to build a true competitive advantage and real long-term success.

How is this done? In the world of psychiatry, past behavior is the best predictor of future behavior. The same is true for construction. The way to identify your best chance of success with future projects is by reviewing past project performance. (See Exhibit 1.) A completed contracts analysis allows you to identify your sweet spot so that you can focus on the work that you do best.

The most common form of profitability analysis is the comparison of actual gross margin to estimated gross margin by various factors. Also identifying consistencies and trends in margin gain or fade will reveal a wealth of information about your company's core competency.

A good completed contracts analysis reviews completed work and examines profitability according to such factors as gross profit, project size, owner, type of contract, market sector, and geographic location. (See Exhibit 2.) Other factors that can be used to analyze past projects include the identities of the superintendent, project manager, or lead estimator. (See Exhibit 3.) A completed contract analysis can also address other criteria specific to your company, such as the process used in obtaining the contract, whether the work is public or private, and the amount of self-perform work.

A good completed contracts analysis reviews completed work and examines profitability according to such factors as gross profit, project size, owner, type of contract, market sector, and geographic location.

This article presents a template for conducting a completed-contracts analysis on your work history; the results can help you find your sweet spot.

STEPS FOR COMPLETED-CONTRACTS ANALYSIS

Select Criteria: The first step in conducting a completed-contracts analysis is to determine the factors that will be used to analyze past work. The following basic list of criteria should be a part of any analysis. Suggestions are included that will help get the process started.

Job size: a breakdown of completed contracts by contract revenue is a critical component of any completed-jobs analysis. This requires a review of the range of job sizes that your firm currently pursues. The scale and breakpoints will need to be adjusted to fit with the range of projects being built. (See Exhibit 4.) For example:

(a) $1,000–$10,000
(b) 10,000–$50,000
(c) $50,000–$100,000
(d) $100,000–$500,000.

You may find it necessary to adjust the scale to fit larger jobs such as:

(a) $500,000–$2 million
(b) $2 million–$10 million
(c) $10 million–$20 million
(d) $20 million–$50 million
(e) above $50 million.

Exhibit 1

5-Year Performance by Type

Average Gross Profit Percentage

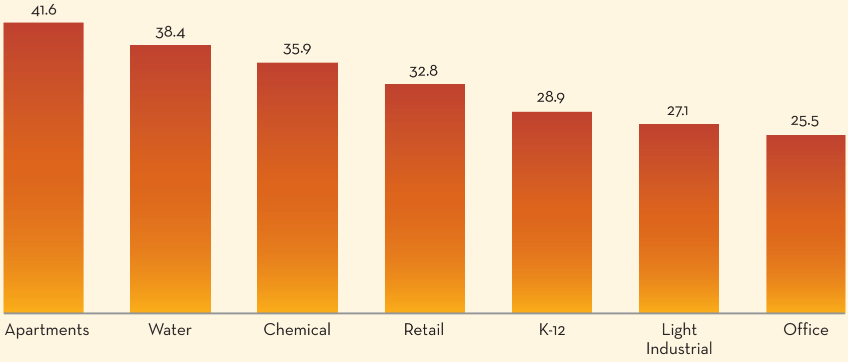


Exhibit 2

Performance by Project Size

Gross Profit Percentage

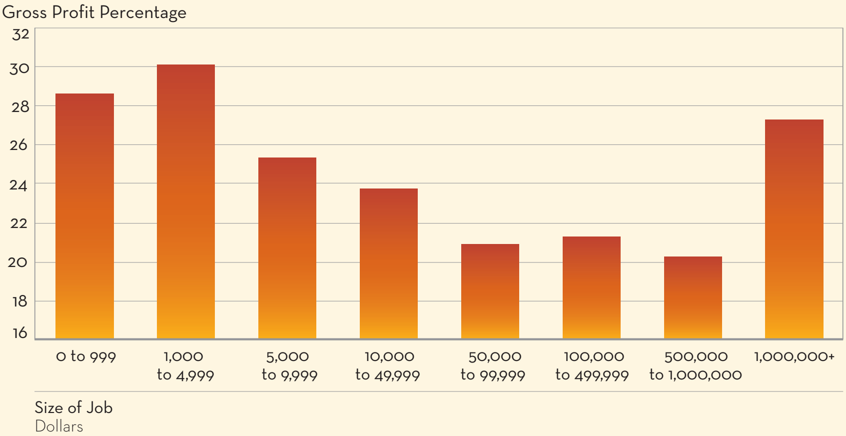


Exhibit 3

Performance by PMs

Gross Profit Percentage

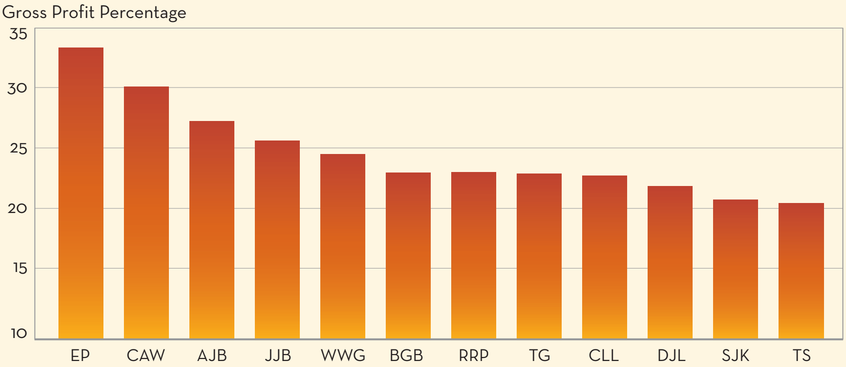
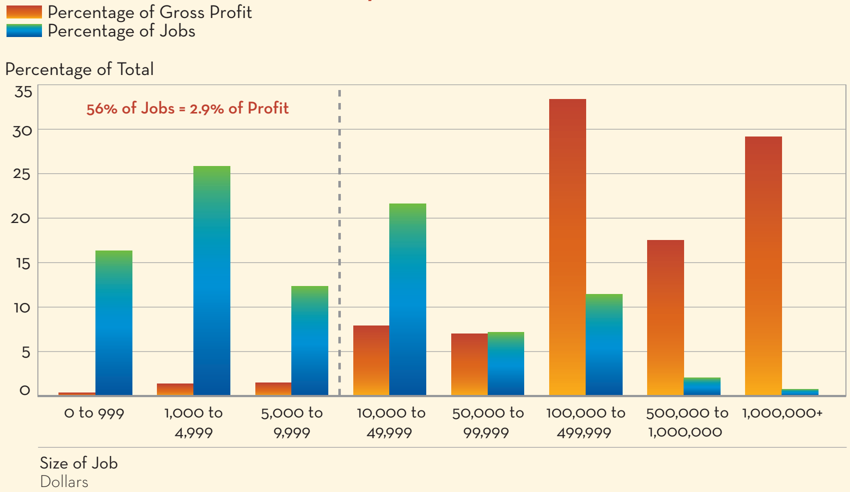


Exhibit 4

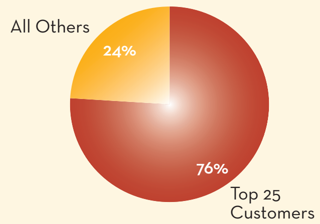
Contributions to Total Profit and Jobs by Size



It is not critical to create an even distribution of projects to size ranges, but it is important to consider the number of jobs per size range. Look for logical breakpoints in sizes. As the job size increases, there will probably be fewer projects per size range unless the ranges are widened substantially with size increases.

Exhibit 5

Top 25 Customers by Revenue



- 189 jobs (27.7%)
- $22,073,671 revenue
- $116,792 average job size
- 76.1% of revenue
- 28.7 average gross profit
- $6,324,156 gross profit
- 77.6% of gross profit

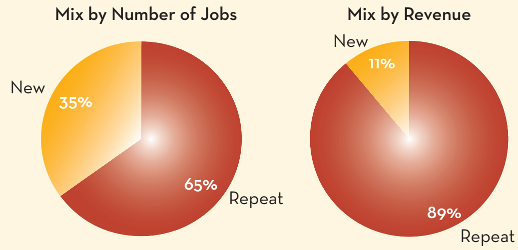
Owner: The types of owners your company builds for is an important component of the completed-contracts analysis. Owners should be classified by public/private at a minimum. Additional classifications may include: developers, commercial, state, county, federal, municipal, regulatory of authority etc. Here again it is important to take time to identify logical breakpoints between owner types. If the work you do is spread between too broad a range of owners, then you may have too few projects per range for meaningful analysis.

You may also find it useful to assess performance on contracts completed for specific owners. (See Exhibit 5.) For instance, if you find that many of the projects you work on are for repeat clients, it will be useful to determine your top 10 clients with regards to gross profit. In addition to gross profit, also assess the total volume of work and number of projects per repeat client. (See Exhibit 6.) This will allow you to specifically target your business development tactics to individual clients with increased understanding of your success with these clients.

Type of contract: There are various types of contracts that can be entered into when building projects. Regardless of the type, it is useful to identify performance in each.

Exhibit 6

Repeat Versus New Work



Repeat Business
- 446 jobs
- 28.4% gross margin
- $25,772,297 revenue
- $57,785 average job size

New Business
- 237 jobs
- 25.1% gross margin
- $3,225,925 revenue
- $13,611 average job size

These include fixed price or lump sum, unit price, cost-plus, time and materials, agency cm or cm at-risk, and varieties of design-build contracts. Your company may not use all of these types, but it is important to identify the contract types that you use most often and include those factors in your completed-contracts assessment.

Market sector is another important factor to consider. Very few contractors focus on only one market sector. You may find that you work in a broad variety of markets and may not be profitable on some or most of them. Example sectors include healthcare, industrial, multifamily residential, retail, k-12 schools, public or private universities, offices, multi-unit retail, sports facilities etc. These broad-sector categories can then be broken down further to identify more detailed sectors, if sufficient project history exists.

OTHER POSSIBLE FACTORS

Geographic location or distance from your office(s) may be another important factor in determining project success. Many companies have great difficulty managing projects profitably at a distance. It is possible that projects in the immediate vicinity of the office may be more successful. Identifying trends or consistent performance will help to determine the best projects to pursue.

Many companies have great difficulty managing projects profitably at a distance. It is possible that projects in the immediate vicinity of the office may be more successful.

If a company has more then one office, it makes sense to assess the performance of projects managed out of different offices. Here again, profitability changes may identify either superior branch-office management or better local opportunities for a variety of reasons.

As with project size, specific ranges or scales should be developed and applied to all past projects. For example, projects within one to five miles of an office, projects from five to 15 miles from an office, and projects more than 15 miles from an office.

Year: By adding the dimension of time to the completed-contracts analysis, trend analyses can help determine improvements or declines in types of work, contracts, market sectors etc.

Procurement method: Consider how contracts are procured, and assess performance based on procurement method. Projects may be pure hard-bid, select bid list, negotiated, etc. Be sure to include this to help in determining which projects to target in the future.

People: (Project Manager, Superintendent, or Estimator) By linking the superintendent with project performance, a clear assessment can be made about how projects are being led in the field. Definable trends can be identified, and a determination can be made as to who are really the top performers in your company when completed profits are contrasted with budgeted profits.

Project managers have the ability to make or break a project. By including them in the completed-contracts assessment, a track record of performance can be established. You may find that there are several key project managers that do an exceptional job, and you may find that there are several that do not.

In cases where one estimator has primary responsibility for each job estimate, trends can be identified that verify superior or poor performance.

Regardless of personnel assessment, it is highly desirable to identify your top performers. If your company's systems and processes allow for a significant amount of individual style, it is even more important to understand whether one of these styles yields the best results. In cases where systems and processes are rigid and consistently applied throughout the company, it is important to find out who applies them with the most success. This determination will then allow you to improve performance throughout the company.

You may find that there are several key project managers that do an exceptional job, and you may find that there are several that do not.

In addition to assessing individual performance, you may also identify trends of performance with combinations of people. For instance, a project manager may work with several superintendents on a regular basis. It may be useful to identify which teams work best.

Division: Divisional performance is usually part of any financial review process. An understanding of how divisions within a company perform is critical to determine future strategy. Here again, it is critical to understand how this performance occurs by project over time.

ANALYZING THE INFORMATION

Input: Once the criteria is identified for conducting a completed-contracts analysis, a simple process of sorting and identifying trends is the next step. The most effective and widely available tools are Excel and Lotus spreadsheets. The data is entered into the spreadsheet in a column format. Some construction accounting systems such as Timberline allow for a transfer of data from that system into Excel. It is important to ensure maintenance of data integrity at all times. The information generated from the completed-contracts analysis will be of little value if the data transfer is corrupted.

To ensure data integrity, eliminate any jobs listed that do not contain complete information. If the project information is not complete, either research and complete the information, or eliminate that job listing. It is important to conduct additional research when needed, if your company completes few jobs per year. However, if you are assessing hundreds of jobs, it will be easier to eliminate the jobs without complete information. Still, this should be done carefully as you do not want to eliminate too many jobs, thereby skewing the data and creating bias in the results.

It is important to ensure maintenance of data integrity at all times. The information generated from the completed-contracts analysis will be of little value if the data transfer is corrupted.

Sort: Initially, sort all projects by gross profit. Multiple worksheets can be created for each sort. Within each sorted worksheet, stratify the data to create categories for analysis. Once multiple worksheets have been created and the data stratified, additional sorts can be made to identify additional trends. If you have enough information in your original data-gathering effort, you may also sort by profit fade or gain on a job. By sorting by profit fade or gain, you have the ability to identify the types of projects in which you manage the budget inconsistently or create profit gain. This information can be critical if you are looking for financial stability.

CROSSCHECK

If the data is sorted thoroughly in each worksheet, a crosscheck can be made as a check and balance to ensure that the worksheet is accurate. For example, assessing gross-profit percentage by contract type by project manager should yield the same number as assessing gross-profit percentage by project manager by project type.

Often graphics will quickly reveal trends and characteristics that mind-numbing tables of data do not readily reveal.

IDENTIFY TRENDS

At this point, identifying trends is fairly easy. Simply identify the average gross margin or profit by specific type of work, type of contract, geographic location, division etc. within each factor level. Identify which of these groupings has the highest and the lowest average gross profit. It may be also useful to identify types of jobs that have the greatest and least profit fade.

PRESENT GRAPHICALLY

Once the information is sorted and stratified, it should be prepared and presented in a useful format. The most useful way to present a significant amount of financial data is with color graphs. Graphical representation of various sorts and trends create a visual depiction of company performance and competencies. Often graphics will quickly reveal trends and characteristics that mind-numbing tables of data do not readily reveal. See the samples included with this article to get an idea of how to show the results.

REVIEW

Now that your completed contracts data has been compiled, it is time to review the findings. It is not unusual to discover that certain types of work are unprofitable. Many contractors pursue the same type of unprofitable work for years, or until they go out of business. To be successful, companies must evolve with markets and adapt to new opportunities and changing conditions. A successful completed-contract analysis helps you to identify what you should stop doing as well as where you should focus your efforts.

To be successful, companies must evolve with markets and adapt to new opportunities and changing conditions.

DISCUSS

You should use your completed-contracts analysis as a strategic planning tool. Discuss the results with your senior managers or planning team. Expect complex discussion as to why performance occurs in certain areas. There are many factors influencing the profitability of projects, so this discussion may evoke reactions from those responsible for performance. However, regardless of the reactions, be willing to make difficult decisions regarding your areas of expertise and focus.

DEVELOP A FOCUS

Using the discussions as a catalyst, narrow your identified competitive advantages to a few. However, don't be limited to two or three types of work. You may find in the analysis that your competitive advantage may be working with commercial project owners. These owners build a variety of types of projects including: offices, retail, sports facilities etc. Allow yourself to identify several possible focus areas that are not limited to one factor.

PLAN

Once potential competitive advantages are identified, you can begin both strategic and tactical planning to pursue projects that expand your competitive advantages. The planning process should yield clear plans of action with specific steps to leverage your competencies. ■

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Savvy Owners Can Make You More Profit!

Contractors and design firms who are committed to building a client portfolio of quality owners will be more profitable, but it takes an investment and a strategy to build.

By Keith Reester

Let's start with a basic question: Would you rather work for an owner who knows their stuff or one who doesn't know rebar from rework? Your team has likely worked for both, and looking back, if you managed the project and the relationship right, you probably made more profit from the knowledgeable owner.

The fact is: Knowledgeable owners will set higher expectations and demand more exact communications, more face time, and greater collaboration. But, top-flight contractors want first-rate owners as their primary customers.

The challenge in today's ever-demanding marketplace is to find first-rate owners and to keep them as customers. Contractors and design firms who are committed to building a client portfolio that emphasizes quality owners will be more profitable, but it takes an investment and a strategy to build that base. First, let's define a "great owner." If you asked your team members, office, field, and business development personnel, most will list similar criteria:

- Know what they want and are willing to pay a reasonable price for it
- Are knowledgeable about the product they are buying
- Understand design and construction
- Employ competent people
- Are collaborative and honest
- Invest in pre-planning the project

- Understand the level of time investment their people will need to make the project a success
- Are knowledgeable about risk associated with the work and understand that they own part of the risk; if it is shifted, the recipients need to be compensated for that risk assumption
- Are proactively involved in the project — at the field level and the leadership level
- Recognize design, contractor, and subcontractor expertise
- Make clear and timely decisions
- Understand that documentation is a key part of construction today, stay current on submittals, change orders, progress reports, and RFIs, and hold the team accountable to that standard

This list was created from a brief survey of three dozen contractors, ranging in size from $10 million to $1 billion in annual revenue. In reviewing the list, most owners would look for the same thing in a great contracting or design partner. So it's a smart idea to start with a good look in the mirror.

LOOKING IN THE MIRROR

Take a good look at your team and how they interact with your clients. Do your field personnel run for cover when the owner's representative shows up on site? Is your first reaction to build a case for a change order, or do you proactively reach out to the owner early in a prospective change and seek input, collaboration, and buy-in?

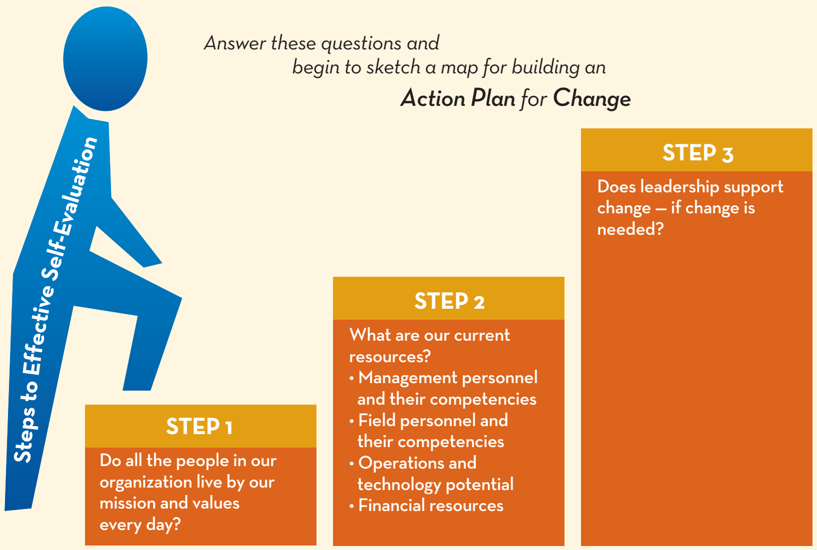
Below is a list of contractor traits. Check off each one that fits your company profile.

- Proactive in communications
- Meets committed schedules
- Meets committed quality standards
- Meets agreed-upon budget
- Controls contractor-initiated changes
- Communicates openly and freely
- Measures performance during the life of a job
- Creates relationships that are strong when the job is complete
- Creates desire to work with them again on another job
- Pays subcontractors in a timely manner
- Manages documentation and paperwork
- Manages closeout and startup well
- Creates no surprises

Now, ask yourself, would your 10 most-recent customers rate you the same way? If you have any doubts, your first step to building better owner relationships is to develop action plans for areas that need work. (See Exhibit 1.)

Exhibit 1

Building a Self-Assessment Based Action Plan



PUBLIC VS. PRIVATE OWNERS — IS THERE A DISTINCTION?

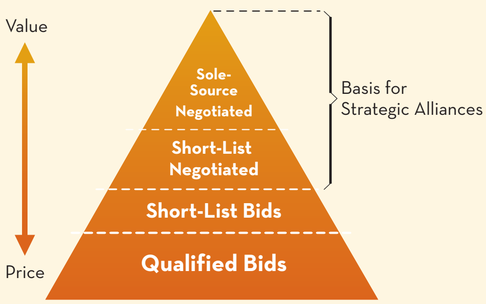
Most contractors associate public-sector work with hard-bid work, but that is changing in today's market. Historically, many private owners chose to use hard bids for their primary project-delivery method. Public owners typically have a more rigorous paperwork and pre-qualification process and a greater ability to contest a bid award, but ultimately, it is not the difference between public and private that matters. The crucial component in ascertaining an owner's aptitude for "savvy," is their willingness to look at more than price.

In an article from the *Contractor's Management Journal* (FMI June 1999) entitled, "Owner-Contractor Strategic Alliances: The Price-Value Equation," Chip Andrews and I highlighted this critical view on price vs. value. (See Exhibit 2.)

"When decision-makers are building a procurement framework, some decisions are made solely on price, while some focus on value. The value-price relationship is built on the theory that some items are purchased solely on price, while some others are based more heavily on the overall value. Commodity items, usually purchased on price, are typically interchangeable from supplier to supplier." Further that, "…when products and services are value purchased, buyers typically consider the TCO (Total Cost of Ownership) and value added due to unique knowledge or processes."

Exhibit 2

Value-Price Relationship



Determine whether the products and services you provide are viewed as a commodity or a value purchase in your marketplace. If the product line offered is a commodity, then a good look needs to be taken at your organization's strategic marketing plan to determine if there are areas where more value-added services should be fostered. Most services that are offered lie somewhere between pure price and pure value. With that in mind, let's look at some methods whereby you can assist an owner in becoming more savvy.

Most owners seldom feel as if they are rolling in cash, so cost sensitivity is always on their minds.

THE CAPITAL FISCAL CRISIS DRIVES BUDGETS AND SCHEDULES

Most owners seldom feel as if they are rolling in cash, so cost sensitivity is always on their minds. Public owners tend to feel this even more acutely as demands for general fund tax dollars continue to rise from the constant pressure of social services and a general public malaise for tax increases. Recognizing that an owner has cost objectives for a project is critical, and the necessity of hitting those targets is of vital importance to the owner's project manager. In a recent remodel project in Northern Colorado, several design-build teams offered their services, and in only one case did the team bring a number with contingency that was within the owner's budget. The owner's project budget had been included in the RFQ documents, so every team was aware of the top end. Guess who got the project? The other designs were similar and met the owner's need, but the owner interpreted the other bidders' offers as not sensitive to a critical need of the owner — value for the cost.

Lesson No. 1 for building a savvy owner: Determine where your product is on the price-value equation for each prospective owner and target the value-minded owner.

Every day owners are seeking faster schedules from designers and contractors. Every day that a facility is operational is money in the owner's pocket. Contractors and designers have been working in this environment of tight schedules for more than 20 years now and should be able to work with the owner to create reasonable expectations for performance. Contractors or designers need to bring that expertise to the table in a proactive manner to help owners best capitalize on their budgets; owners are not just paying for speed — they're paying for expertise.

On the other hand, some owners want to get a hard-bid price and then knock it down. General Motors' value-pricing strategy from the 1990s is a good example. In this case, it only took a couple of bid cycles before everyone in the market knew how the game was played, and

Lesson No. 2 for building a savvy owner: Work with owners in non-project/sales framework to help them build expertise and expand their palette of choices for project delivery.

contractors and designers began adding a "premium" into the bid, or would win the bid and staff the project with new designers or a less talented team.

BROADENING THE PALETTE OF CHOICES

Hard-bid procurement is the most streamlined and least complex for an owner organization, and there is a perception that because you have a low price you have assumed value. Additionally, the low-price method allows owners to use little company staff to complete projects by outsourcing work to design firms. The second critical step in building a knowledgeable owner is working with them to broaden their palette of choices in project-delivery methods.

Many owners, especially in the public sector, are burdened by the limited methods with which they can deliver projects. Many communities have strict limitations in their legal code, while many private owners have a company-purchasing policy that limits their choices. Working with an owner on the professional front to assist them in broadening their choices for delivering projects is essential. We're not talking about lamenting during a sales call about their lack of ability to use design-build. Working with an owner in a non-sales or non-project mode to help them build their choices is the most successful approach.

Many owners, especially in the public sector, are burdened by the limited methods with which they can deliver projects.

This approach serves two purposes. First, it builds a relationship with the client or potential client, and second, it allows discussions about alternative-delivery methods without the clutter or pressure of a specific job or sales pitch. Provide owners with examples of other companies using non-hard-bid methods and give them contacts. Show them job post-mortems on the pluses and deltas of completed projects with different methods. Seek to work with them to overcome hurdles to success and listen to what they perceive as the major obstacles to project-delivery alternatives.

It will be amazing how fruitful these discussions can be even with no specific project hanging in the balance.

Exhibit 3 is an example of how you might start this discussion with an owner.

LISTEN — DON'T HEAR

Do you have kids — a teenager? Even if you don't, you probably know the difference between hearing and listening. Hearing only connotes that you perceived sound; listening involves more — paying attention and trying to understand the communicator's message. In the 2003 CMAA survey of owners conducted by FMI and CMAA, the one item noted most often was communication.

You can create savvy owners by listening to them and helping them overcome

Exhibit 3

Mile High City, Colorado

Delivery Method	Currently Used	%	If "Yes," Why? If "No," Why Not?	Obstacles To Use	Types of Project/Market—Best to Use	Needs
Hard Bid	Yes	20	Good for commodities, i.e., asphalt			
Qualified Bid	Yes	55	Most common — purchasing supports			
Short-List Bid	Yes	15	Only for very large jobs			
Short-List Negotiated	No		Closed negotiations prohibited by code	Code/City Council		This would be a helpful method especially for design/engineering work
Sole-Source Negotiated	No		Closed negotiations prohibited by code	Code/City Council		
Strategic Alliances	Yes	5	Yes, but only for transit services with another governmental agency			
CM	Yes		Yes, but for specialty jobs such as fire stations			
CM/GC	Yes	5	Common approach used for park projects. Why? Had good success in the past — not very common outside of that department			
Design-Build	No		Available in the code for use, uphill battle for use with purchasing and city council	Code/City Council		Education of purchasing and council — examples of successes
A+B	No		Purchasing does not like this method			

Other Notes
- Council must approve contracts over $500,000
- Professional-services purchasing OK without bids up to $100K
- Non-Professional services — bids above $15K

their obstacles to success. Too often we offer OUR solution to their problem vs. helping them collaborate to create a jointly-owned solution. From a historical perspective, the relationship triangle between owner-designer-contractor has always had a heavier bond between the owner and designer. Contractors lament this relationship as bad for the owner, bad for the contractor, and bad for the project.

Why do you think the relationship between owners and designers is often so much stronger? The designer has an inherent advantage — the design team has the ability to turn the owner's ideas into something more concrete, a design, a set of documents. The designer has to listen to get something out the door; very seldom does an owner give a designer the "green light" with no parameters. By the time the owner has put documents out for bid, they have built a partnership with the designer, and the owner views the designer as an ally. The first thing many contractors do is question the documents and the design, immediately forcing a confrontational approach with the owner and designer. Is it any wonder that the relationship bond is stronger between two allies? So what is the alternative?

Lesson No. 3 for building a savvy owner: Listen to owners first, then assist them in developing a plan for success. The more proactive every member of the team is on the communication front, the greater the chance for success.

First, work with owners to invest in pre-bid activities, such as conducting comparative-cost estimates by contractors, holding a peer review of the design, and defining clearly before the job is awarded how the collaborative process will work to strengthen the documents. Listen to their internal process for decision making, and help them to influence their decision makers to make more timely and accurate decisions.

INVEST IN MUTUALLY DEFINING EXPECTATIONS & PARTNERING FOR SUCCESS

Lesson No. 4 for building a savvy owner: Set mutual expectations for communications and team ground rules — partnering is one of several good methods to achieve this end.

Numerous contractors, owners, and designers have tried partnering and had mixed success. Most often you hear statements like, "It was too 'touchy feely;'" "We all felt good about the project, but we didn't have any specific plans;" and "There was no follow-up." All these are valid experiences, but the best investment of a good high-performance team approach is to invest the time up front to define expectations for communications, issue resolution, and proactive involvement at the executive level. Admittedly, if you don't invest in follow-up and accountability, then the value is substantially reduced over the life of the project. In a recent interview, one construction CEO said, "I will always invest in partnering before a job hits the ground; it allows us to hit the ground running and to make substantial headway in defining channels of communications. I know that I will get that money back five-fold if we avoid even one major issue on the job."

If you have used partnering or team building on a job, look back and do a post-mortem on why it was successful just like any other portion of the job. Building a relationship with a facilitator that can be successful with various owners can be valuable. Also, don't forget to share your partnering experiences with an owner in the non-project approach as well.

Lesson No. 5 for building a savvy owner: Help owners to develop a vendor-owner evaluation program by creating a two-way street of communications to enable future project success.

VENDOR/OWNER EVALUATION PROGRAMS

Nearly every owner, even the ones that are "old-school hard-bid," has added the clause "lowest responsible bidder" to their bidding documents. The problem is that being "irresponsible" is usually difficult for an owner or another contractor to prove. Some items most companies would see as irresponsible are:

- History of claims
- Making profit margin after the bid with change orders
- Poor safety record
- Previous poor performance on a job — but not bad enough to warrant a claim
- Reputation for poor onsite communications with subcontractors or the owner
- Poor payment history to subcontractors

Some owners have successfully invested their own resources in developing vendor-evaluation programs that clearly allow vendors to be rated on a regular basis. These programs are good from the standpoint of creating a basis for identifying irresponsible bidders, but fall short of realizing their maximum potential. The truly savvy owner understands that all four legs of the project team need to be evaluated to capitalize on the learning process. The four legs are: owner, designer, contractor, and subcontractors.

Encourage owners to evaluate their own vendors as well as having vendors evaluate owners and other project peers; this can provide tremendous value. Vendor-owner evaluation programs need to be well developed and have clear outcomes, as well as open lines of communications, to be successful. Otherwise, responses will be written with an audience in mind and truthful information will be fleeting.

BUILDING THE SAVVY OWNER

For many business-development professionals, it may seem that the process of building a savvy owner is the same process as building a quality customer relationship. But, if you step back and look at the relationship beyond the sales situation, it will become clear that it is more about making the owner an ally in knowledge. When was the last time your firm invested in the education of owner clients beyond a new product offering? Have you ever teamed up with a competitor to present an owner's workshop? When was the last time you worked with the field staff to help owners win?

Don't simply reevaluate your business-development program when building owners. It is critical that every person in your organization and every firm you ally with on a job is interested in the same outcome — success for the entire project team and the relationship between those component companies. Take the above five lessons to heart and invest in building better owners because if you do, you will see more profit on your balance sheet. ■

Keith Reester *is the Director of Public Works for the City of Loveland, Colo.; Loveland is a city of 60,000 and is one of the fastest growing cities in the United States. Keith is a former FMI consultant and works to develop win-win relations in all construction efforts. He may be reached at 970. 962.2520 or reestk@ci.loveland.co.us.*

Case Example: MAPP Construction, Baton Rouge, La., Annual Owner/Subcontractor Forum

For the past five years Mike Polito, president of MAPP Construction, has invested in his owners and subcontractors. One day each year, MAPP hosts an Owner/Subcontractor Forum. In the forum, the MAPP team, from president to field personnel, comes together to hear a panel of owners talk about what makes a great contractor and how each owner sees the world a little differently. In the afternoon, a similar panel of subcontractors comes together to share their insights. In both cases, the panelists are both clients and non-clients, and employees are encouraged to ask questions and share ideas. The session is facilitated by an FMI consultant.

The session always leads to great insights into the relationships that we all foster on projects. It also builds a sense of camaraderie across the industry silos that usually exist. One common theme expressed by panelists is that taking the time and resources to invest in this effort shows that MAPP cares about what we think, and that's not the norm in this business.

Public Works Department Leads Vendor-Owner Evaluation Charge

In a recent example, the Public Works Department of the City of Loveland, Colorado, undertook the development of a department-wide, vendor-owner evaluation program. The city of 60,000 in Colorado's North Front Range is one of America's fastest growing cities and was chosen in 2002 by the AARP as the best place in the United States to retire. The department has an annual $15,000,000 capital program, which includes infrastructure, stormwater, structures, and facilities programs to support and add to 650,000 square feet of space.

For several years, the department had added the "lowest responsible bidder" clause to their documents, but had never exercised that right due to lack of legal leverage. In 2003, the department undertook an internal initiative to develop a program to evaluate all vendors and to have all vendors evaluate the city as a partner in the process. The team involved identified several key areas to tackle:

- Pre-job expectation agreements (both formal and informal)
- Regular evaluations throughout the life of a job
- All evaluations must include a self-evaluation component
- Post-job evaluation framework
- Process to share "mid-stream" evaluation results with the team for improvement
- Framework for vendors to provide value-added opportunities for improvement suggestions in a non-bid evaluation environment
- Evaluation forms that are consistent across vendor category, with variations for professional services, commodity products, and construction
- Evaluation forms that are easy to complete, clear in their directions, available electronically and over the internet

First, the team researched vendor-evaluation programs of other companies around the nation and vendors that the department already had under contract. After this initial phase, the team developed a core group of vendor partners to seek feedback and input from in the process. The vendors ranged from office-supply vendors to contractors, architects, and janitorial services.

"Vendors were excited to hear that we were pursuing this program and readily offered to assist our efforts," Public Works Engineering Manager David Klockeman said. "Several commented that this would only help our organization be successful, and the chance for two-way communication was tremendous. I think our program will help the really good companies be more effective in not only getting work from us, but from other owners as well."

In the first quarter of 2004, the city began piloting the program with several vendors. Their goal is to have every vendor serving the department on board by the fourth quarter. The greatest lesson learned in this process is that good companies will take every opportunity to improve performance — helping owners embrace this approach will help every team member.

"The Apprentice:" Leadership Fact or Fiction?

"Peak Leaders" exhibit a set of principles that distinguish them from average leaders. We will evaluate whether the television show, "The Apprentice," adequately assessed the realities of Peak Leadership.

By Tim Spiker

"You're fired!" — these words have never known such popularity in the American vernacular. Only reality television could take such a dreaded message and make it popular. For 13 weeks in the spring of 2004 (and its second season began this fall), American water-cooler conversations were dominated by talk of "The Apprentice," executive producer Mark Brunett's latest reality television invention.

On the show, businessman turned media mogul Donald Trump observed 16 would-be apprentices, putting them through a myriad of business exercises to determine which one would win a one-year contract to become his personal apprentice and run one of his companies.

What principles of leadership did "The Apprentice" highlight? Did the show truly evaluate its contestants based on extraordinary leadership principles? Did the tasks that the contestants endured highlight skills necessary for outstanding business leaders? While "The Apprentice" provided entertaining television for millions (more than 40 million watched the final episode), did it define leadership in its greatest form?

FMI has a set of principles that we believe distinguish extraordinary leaders from average leaders. Leaders who effectively demonstrate these principles are able to truly maximize their individual leadership impact. These leaders are called Peak

Leaders. Our intent is to evaluate whether "The Apprentice" adequately surfaced and evaluated the realities of Peak Leadership and, through this analysis, introduce you to FMI's leadership paradigm. As we explore each aspect of Peak Leadership, we will rate the show's performance in measuring these aspects of leadership on a scale of -5 to 5. A rating of 5 indicates that the show purposefully sought to clearly display whether or not the contestants exhibited such leadership qualities. A rating of -5 indicates that the show not only failed to measure those characteristics of Peak Leaders, but sought to emphasize something to the contrary. If the show did nothing to address a particular aspect of Peak Leaders, we will rate it as a 0 in that area.

Our intent is to evaluate whether "The Apprentice" adequately surfaced and evaluated the realities of Peak Leadership and, through this analysis, introduce you to FMI's leadership paradigm.

REGARDING "THE DONALD"

Our intent with this discussion is not to personally evaluate Donald Trump, the billionaire executive, or assess his level of success as an individual or a leader. There are billions of reasons (quite literally) why we must admit that, at least by financial standards, Donald Trump has been successful and might be an exceptional leader. Though this evaluation of "The Apprentice" may make some leadership ideals surface that Trump does not appear to possess, you need not conclude that Trump is a leadership failure or that FMI's leadership paradigm is inaccurate. Simply conclude in this case that, despite all his financial success, Trump may have missed some opportunities to become even more successful and an even better leader.

THE STRUCTURE OF "THE APPRENTICE"

Sixteen candidates selected from an applicant pool of 250,000 — the cream of the crop, the best of the best — were summoned to Donald Trump's offices in New York to vie for the right to be Trump's very own apprentice. Each week contestants were split into two project teams, led by a designated project manager, to compete against one another in various business endeavors. The activities varied from selling lemonade on the streets of Manhattan to organizing a concert for pop star Jessica Simpson at Donald Trump's hotel and casino in Atlantic City, N.J. The winning team was simply the one that held the most dollars at the end of the project. As with most reality shows, each week at least one player was removed. On "The Apprentice," that player was determined by Donald Trump and his staff from a group of three players on the losing project team. These three players included the project manager and two members of his or her team most responsible for the loss as determined by their project manager. Each show (except the finale) concluded in the boardroom with Donald's now famous words, "You're fired!"

And with that, let us begin our investigation.

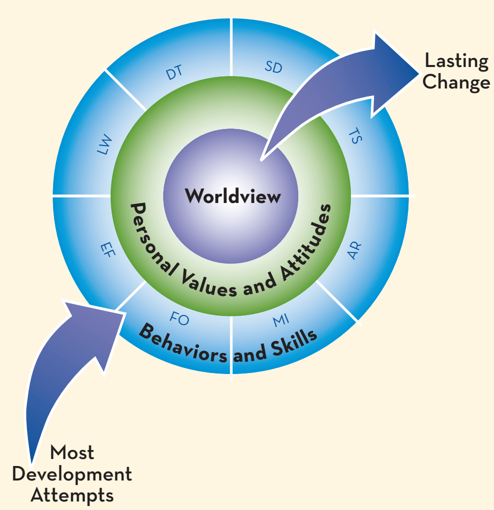
PEAK LEADERS HAVE CLARITY OF WORLDVIEW

Worldview is, in its essence, that which defines and informs everything a person sees. It is the way in which individuals define life itself. It is the manner in which people explain the world around them. As a metaphor, worldview is like a pair of sunglasses that people put on at the start of each day that color and spin how they see the world. It is defined by what individuals believe about questions like:

- Where do people find joy?
- How much control do people have over their own destinies?
- Are people inherently good?
- Are there absolutes in life, and if so, where do they come from?

Exhibit 1

Impact of Worldview

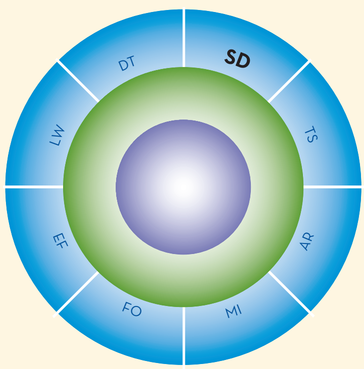


As you can see in Exhibit 1, while most development attempts focus on the behaviors and skills of individuals, lasting change and impact comes from impacting one's worldview. And it is worldview that informs and influences a person's personal values and attitudes which, in turn, inform and influence their behaviors and skills.

While every person has a worldview, few are clear about what their worldview is and how it impacts their lives. Peak Leaders, that is leaders who have reached and are living up to their full potential as leaders, have great clarity regarding their personal worldviews. This clarity gives them direction to lead consistently in the chaotic world in which we live. Consider some of the greatest leaders of all time: Abraham Lincoln, Winston Churchill, Mother Teresa, Martin Luther King Jr., and Gandhi. Were these leaders clear on their view of how the world worked? Did they know why they believed what they believed and how these beliefs influenced their actions in a tangible way? The answer for these and many other Peak Leaders is an emphatic, "Yes." Clarity around one's worldview is one of the most critical requirements for Peak Leaders.

So how did "The Apprentice" perform in measuring the clarity its contestants had regarding their individual worldviews? While we can observe the actions (the TV-edited actions) of the contestants on the show and make an educated guess about whether they were clear about their worldviews, the program did nothing to directly investigate the question. Therefore, on the subject of clarity of worldview, we give "The Apprentice" a neutral score of 0, for failing to address this critical component of Peak Leadership in any significant fashion.

Exhibit 2
Set Direction



PEAK LEADERS SET DIRECTION

Simply put, Peak Leaders initially and consistently point their followers toward the bigger picture, the grander goal that they are attempting to accomplish, complete, or satisfy. They regularly connect even the most mundane activities back to the big picture and communicate why they are critical to the achievement of a meaningful goal or vision.

To be sure, the managers for each project on, "The Apprentice," had the opportunity to remind followers of the bigger picture, yet Trump and his executive helpers routinely focused on the ability of project managers to control those in their charge rather than set direction for them. While planning, organizing, and controlling are important aspects of leadership, they are often over-emphasized, resulting in the neglect of setting direction and other leadership activities. On "The Apprentice," more emphasis was placed on the leaders' ability to execute their personal strategies rather than on helping their followers stay focused on an exciting, broader goal by setting direction. Donald Trump and his team did not categorically ignore this issue nor did they emphasize it sufficiently in their evaluations. Therefore, on the behavior and skill of setting direction we give "The Apprentice" a score of 1.

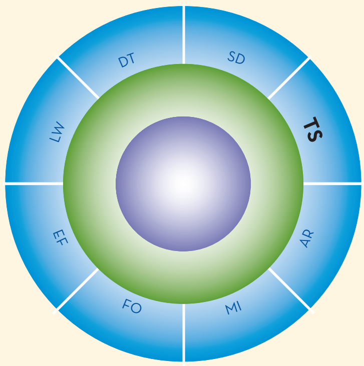
> Simply put, Peak Leaders initially and consistently point their followers toward the bigger picture, the grander goal that they are attempting to accomplish, complete, or satisfy.

PEAK LEADERS THINK STRATEGICALLY

"The Apprentice" put a great deal of emphasis on the big idea that sealed the deal and won the project. Each week Donald Trump and his advisers sought to determine who came up with the best ideas. Unfortunately for the show, strategic thinking is about much

Exhibit 3

Think Strategically



more than generating and recognizing great ideas. It involves seeing the interconnectedness, implications, and consequences of plans and actions. Strategic thinking is also about being a purposeful change agent who focuses on both incremental improvement and paradigm shifts in thinking and executing work. Though not everyone does these things well, strategic thinking is rarely neglected and ignored by popular media when addressing the issue of leadership. In fact, many people boil leadership down to the woefully anemic and overly simplistic concept of generating and recognizing great, strategic ideas. Trump and his advisors appear to have fallen into this trap as well.

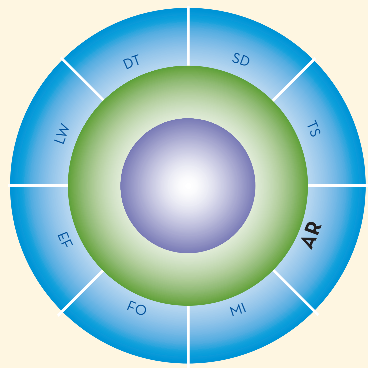
The very nature of the contest's short-term projects made it difficult for "The Apprentice" to accurately gauge the contestants' ability to think systematically, considering both the short- and long-term implications of their decisions on all stakeholders: themselves, their clients, their colleagues on the show, and the Trump organization. Had Trump and his advisors tied each week's activities to the next in assessing contestants and found a creative way to measure their long-term thinking, "The Apprentice" would have garnered a 3. It was not until week nine that contestants began to be evaluated on the whole of their performance (rather than just weekly performance) and the implications regarding their ability to think strategically … including managing relationships within their project teams. As it was, on its recognition and measurement of the behavior and skill of thinking strategically, we give "The Apprentice" a score of 2.

Many people boil leadership down to the woefully anemic and overly simplistic concept of generating and recognizing great, strategic ideas.

PEAK LEADERS ALIGN RESOURCES

The idea that resources must be aligned in order to achieve goals and organizational objectives is certainly not new. Many leaders understand intuitively that to achieve their goals, they must provide the resources to do so. Most leaders recognize they must provide the equipment, manpower, and financial resources necessary to complete the project, task, or goal. It is easy to overlook some of the resources required to meet a goal. In addition to providing resources, leaders must actively seek to remove organizational and sometimes personal obstacles to achievement. This can include misaligned compensation systems or personalities within a team that stunt progress. Finally, and most challenging, leaders must create ownership among followers. It is both difficult and rewarding to create ownership on a project or goal. Leaders who master the skill of aligning resources tap into the "want to" as opposed to the "have to" of their followers. People naturally and easily bring greater amounts of their mental, physical, and emotional capacity to those endeavors in which they have ownership.

Exhibit 4
Align Resources



In "The Apprentice" we repeatedly saw comments that spoke to the issue of ownership. Contestants routinely complained that their project managers were not listening to them or applying their ideas. In defense of these project managers, they were leading teams of people who were accustomed to being in charge and who may have lacked experience in championing someone else's ideas. Certainly, it must be recognized that when brainstorming, not all ideas can be utilized. Nonetheless, while project managers had to regularly deal with the issue of creating ownership, Donald Trump and his advisers did not engage the participants in discussion of how project managers created ownership on their teams. Trump and company focused questioning around which idea they chose as opposed to the manner in which they chose it and how they utilized the idea to create ownership. Though some project teams experienced the benefits of creating ownership, the program did not address the issue directly. Occasionally, issues of manpower distribution came up, but even these discussions were few and far between. On the final show, it was apparent that one particular participant (Omarosa Stallworth) was in fact an obstacle on the road to success for leader Kwame Jackson. In this instance, Donald Trump did specifically and directly address the issue of removing obstacles, in this case the obstacle being a person.

> **It is both difficult and rewarding to create ownership on a project or goal. Leaders who master the skill of aligning resources tap into the "want to" as opposed to the "have to" of their followers.**

The occasional accurate points regarding the proper allocation of manpower and the removal of obstacles are not enough to overcome the ominous cloud hovering in boardroom meetings that emphasized identification of the best idea (which was fairly easy to assess once the results were in) to the detriment of evaluating how ownership was or was not fostered. Therefore, we give "The Apprentice" a score of 0 on evaluating its participants on their ability to align resources.

The keys to motivating and inspiring are encouragement, understanding human psychology and social trends, and knowing people personally.

PEAK LEADERS MOTIVATE AND INSPIRE

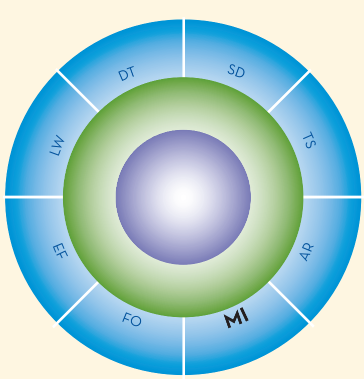
What is the difference between motivation, inspiration, and manipulation? While manipulation seems to be the order of the day on most any reality television show, it is not the preferred method for executing outstanding leadership. Manipulation fails in the long-run because it robs leaders of their most prized asset, trust. Individual interviews with contestants on "The Apprentice" compared to many other reality television shows, revealed that outright manipulation was not as rampant on this show. Boardroom discussions regarding motivation focused primarily on the enthusiasm and "style" of the leader. Contestants regularly commented on whether they agreed with or enjoyed their project manager's style and commented on how that impacted their motivation.

The keys to motivating and inspiring are encouragement, understanding human psychology and social trends, and knowing people personally. Encouragement of team members was not directly evaluated during the program. It was implied that leaders need to understand the psychology of what motivates people to act and perform in particular ways, but this was not directly addressed in the boardroom. Knowing people personally was an acknowledged part of the show, especially as project teams were shuffled from time to time to create new team dynamics.

While Donald Trump and his advisers did not explicitly address issues regarding encouragement and understanding human psychology, the very nature of the show required leaders to know their followers personally. Therefore, despite failure to address motivation and inspiration as directly as it could have, the structure of "The Apprentice" lent itself to many discussions regarding the motivation of individuals. Therefore, we give "The Apprentice" a score of 2 on its ability to measure the key leadership ability of leaders to motivate and inspire.

Exhibit 5

Motivate and Inspire

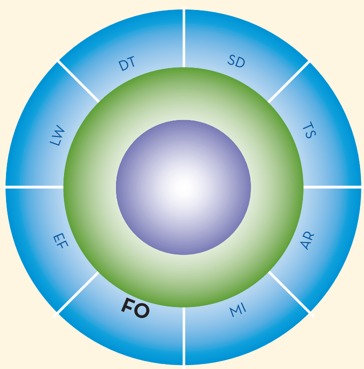


PEAK LEADERS FOCUS ON OTHERS

Many of us have had the fortune at some point in our careers to work for a leader who was truly focused on others. It's engaging to work for leaders who are more consumed with the welfare of others than with themselves. While working for leaders who are focused on others, followers trust more, bring more of themselves to the job, and are much more motivated to perform.

What does it mean to focus on others? There are four primary behaviors that are demonstrated in leaders who focus on others. First, these leaders are humble. Humility is not frequently listed as one of the key leadership qualities mentioned in public opinion polls regarding leadership. Yet research suggests that humility is one of the primary qualities of leaders in companies that have experienced unprecedented financial success.* To be clear, humility is not a matter of smart leaders saying they are stupid or talented leaders saying they are talentless. Humility is not thinking less of yourself; it is thinking of yourself less. Second, leaders who are focused on others are more concerned with the success of their organizations than their personal success. Where will Trump Industries be without, "The Donald?" Leaders who focus on others are keenly aware of the impact their organizations have on employees, communities, and the world. These leaders are more concerned with creating enduring organizations than creating enduring, larger-than-life personas. Third, leaders who focus on others love their followers. Caring about the people being led is a powerful leadership attribute, and yet, if caring about followers becomes a technique for the leader rather than a heartfelt reality, it quickly slips into the devestating realm of manipulation. Finally, leaders who focus on others display emotional intelligence. They are keenly aware of the impact their emotions and reactions have on those around them. They seek to manage their own emotions and the emotions of others for the betterment of the team.

Exhibit 6
Focus on Others



Humility is not thinking less of yourself; it is thinking of yourself less.

Little can be said for the show's treatment of the idea of focusing on others. Trump and his advisors never hinted that leaders should be more concerned with their followers than themselves. In fact, activities in the boardroom seemed to imply that leadership in its essence is exclusively about the leader and the short-term financial results of a leader's behavior. The idea that exceptional leadership requires the leader to focus on others was absent save one project during the show. The project for week six was to raise funds for the Elizabeth Glaser Pediatric AIDS Foundation. As Donald Trump gave his instructions to the contestants, he made a special point that it was the responsibility of business to give back to the communities in which they work. Though Trump displayed some others-focused mentality by selecting a project that required participants to raise money for a charitable organization, "The Apprentice" never really addressed it from a leadership standpoint. Boardroom discussions centered on self-preservation and self-promotion. Therefore, we give "The Apprentice" a score of -3 on the key leadership behavior of focusing on others.

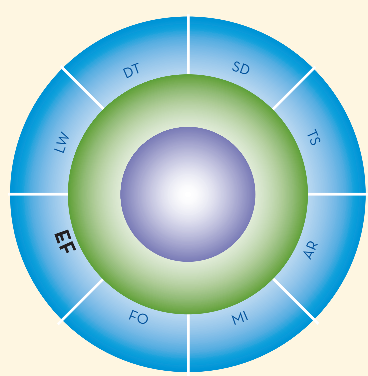
The ability of leaders to plan, organize, and control the projects and endeavors they take on is crucial to leadership success.

PEAK LEADERS EXECUTE AND FOLLOW THROUGH

Peak Leaders don't merely talk a good game; they get things done. They are able to accomplish that which they set out to do by taking care of all the details, either personally or through effective delegation.

The ability of leaders to plan, organize, and control the projects and endeavors they take on is crucial to leadership success. Unfortunately, leadership is sometimes narrowly defined as the ability to plan, organize, and control. Instead, these are critical components of the management portion of the job. Important in executing and following through are the technical skills that leaders must possess. In the case of "The Apprentice," technical skills included sales, negotiation, and financial management. In the construction industry, these technical skills may include project management, engineering, and for non-field personnel, the business skills of sales, business development, and financial management, to name a few. The technical skills required of Peak Leaders vary depending on their current roles in organizations. In order to execute and follow through, leaders must be willing to ask the question, "How?" That is not to say that Peak Leaders are micro-managers, rather that Peak Leaders take on the responsibility of ensuring that the plans that they are making are grounded in reality and not in an imaginary world where everything goes well all the time.

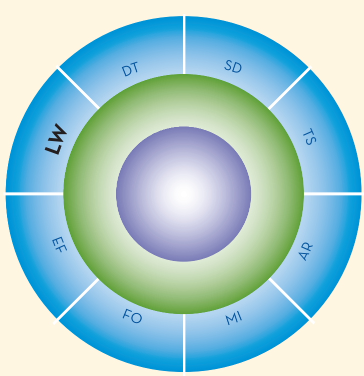
Exhibit 7
Execute and Follow Through



Leaders who execute and follow through well must cultivate an atmosphere of tenacious honesty around them. In order to answer the question, "How," leaders must be willing to have difficult conversations regarding any number of situations and realities that will allow leaders and their team members to function adequately. This cannot be done without an atmosphere where honesty is appreciated even in tough circumstances. Perhaps most importantly, leaders who execute and follow through communicate effectively. This includes understanding the numerous ways people communicate, both verbally and nonverbally. Leaders who execute and follow through are constantly monitoring and managing not only the content of their messages, but the way in which they are delivered.

Due to the short-term nature of the projects on "The Apprentice," it was critical for leaders to execute and follow through. Donald Trump and his advisers frequently challenged project managers regarding the execution of their plans. Certainly planning, organizing, and controlling were emphasized, as were the results of asking, "How?" Additionally, technical skills and communication effectiveness (though not adequately considered from a nonverbal perspective) were easily observed and sometimes discussed during boardroom sessions. Though leaders were not asked how they created an atmosphere of tenacious honesty, Trump seems to champion such an ideal, as evidenced in his boardroom candor. All in all, the leaders' acumen in executing and following through was the most scrutinized and assessed behavior of the leaders on "The Apprentice." Therefore, we give "The Apprentice" a score of 5 in its ability to measure how leaders execute and follow through.

Exhibit 8
Lead Within



PEAK LEADERS LEAD WITHIN

With every individual and leader there is a world that only they know, the world within. It is here that leaders determine both who they are and who they are going to show themselves to be.

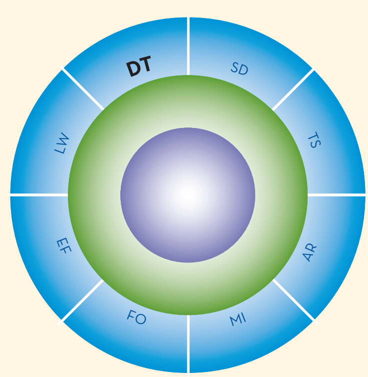
Aspects of leading from within include awareness, character, mission, and discipline. Truly outstanding leaders are incredibly self-aware. They are aware of who they are in terms of strengths, weaknesses, aptitudes, personality, and limitations. They welcome feedback that raises their self-awareness and apply feedback to improving themselves. The character of Peak Leaders is a function of tenacity, honesty, authenticity, and integrity … and character is the primary producer of that ever fragile, yet immensely valuable, leadership resource — trust. There is something profoundly effective about leaders who are clear on what their personal mission is in life. In addition, personal disciplines of the leader are critical for those who desire to reach their full potential. These disciplines include personal effectiveness (mental, physical, relational, and spiritual healthiness as well as the ability to appropriately prioritize time), hope and optimism, and lifetime learning, which includes regular personal reflection.

"The Apprentice" did not deal in any meaningful way with the issues of personal mission or personal disciplines. So we're left to analyze how the show dealt with the issues of self-awareness and personal character. With these issues, we see a cause for great concern. Each week in the boardroom Donald Trump challenged the three individuals who were in the hot seats, one of them about to be fired, to explain why they were better than the two people sitting beside them. As Trump questioned contestants in the boardroom each week, it became clear that anyone who was willing to admit weaknesses or was less talented than one of the other two in the room, would be fired due to lack of confidence and/or a lack of ability. The idea that leaders are infallible experts is inauthentic, dishonest, and jades followers towards leaders and breaks down trust in organizations. Through his boardroom questioning, Trump did not communicate that he merely wanted a confident leader. He communicated that he was seeking a leader who was either blind to or willing to lie about any weaknesses that they might possess. Peak Leaders do not pretend to be perfect. Peak Leaders, leaders that people want to follow, are willing to be honest with others even when honesty means admitting that they are indeed human — imperfect, fallible, and made up of strengths and weaknesses. It's appalling to think that that "The Apprentice" may have communicated to young leaders across the country that the worst thing they could do as a leader is admit that they need to improve. Therefore, we give "The Apprentice" a score of -5 not only in its ability to positively measure how well contestants lead from within, but its apparent opposition to some of the key components of leading from within.

The idea that leaders are infallible experts is inauthentic, dishonest, and jades followers towards leaders and breaks down trust in organizations.

Exhibit 9

Develop Talent



PEAK LEADERS DEVELOP TALENT

Peak Leaders are not merely people who accumulate followers; Peak Leaders are in the business of identifying talent, developing talent, developing leaders, and developing leaders of leaders. They understand the concept of multiplication — they understand that the process of leading is about identifying and developing future leaders. Peak Leaders actively seek to maximize the talents of others even though they might surpass the status of their current leaders.

To evaluate "The Apprentice" on its talent for measuring the ability of leaders to develop talent, you must first understand the grand prize of the contest. Bill Rancic, the winning contestant, became Donald Trump's "apprentice" and won the opportunity to run one of Trump's companies for one year at a salary of $250,000. One year is not a very long time. Developing talent in others is a long-term process. It is the type of thing that people invest in for a lifetime. Developing talent provides immense, long-term benefits, but is sometimes costly in the short-term. The Wall Street mentality that calls corporate America to produce ever-increasing financial results every three months severely hinders many American businesses from properly investing in the development of their people. The very short-term nature of the grand prize of "The Apprentice" and a very long-term nature that developing talent carries with it means that there was no discussion on the show regarding how leaders develop talent, develop leaders, or develop leaders of leaders. A nominal recognition of the need to identify talent was apparent, but it was simply for the self-preservation of the leader and about his or her opportunity to have talent available to complete the project. It was not at all about the identification of talent for the sake of developing people further.

> **Developing talent in others is a long-term process. It is the type of thing that people invest in for a lifetime. Developing talent provides immense, long-term benefits, but is sometimes costly in the short-term.**

If one of the contestants had, in fact, expressed some type of desire or willingness to develop the people on their teams through the course of the various business projects, it would have been fascinating to see Donald Trump's reaction. Would he have applauded them? Would he have called them "stupid" for seeking to help those that could be labeled their competitors? We don't know. What we do know is that the leadership behavior and skill of developing talent was not emphasized in any significant fashion on the show. Isn't it ironic that a nationally televised business contest whose very name suggests that there is something positive about growing, building, developing, coaching, and mentoring other leaders did little to evaluate its contestants on their ability to do so? Therefore, we give "The Apprentice" a 0 for ignoring the need for Peak Leaders to be exceptional developers of talent.

SUMMING IT UP

If you're scoring along with us, here's what you've got:

- Clarity of Worldview — 0
- Set Direction — 1
- Think Strategically — 2
- Align Resources — 0
- Motivate and Inspire — 2
- Focus on Others — -3
- Execute and Follow Through — 5
- Lead Within — -5
- Develop Talent — 0

It's not a very impressive scorecard. Clearly, "The Apprentice" failed to display to its viewers what Peak Leadership is. Perhaps measuring truly effective leadership doesn't make good television … or maybe, despite all his financial success, Trump isn't completely informed about the requirements for outstanding leadership. Or, maybe the show was never about leadership in the first place. Regardless of the intentions of the show, we are left with a simple, two-word message for the creators, producers, and directors regarding their ability to communicate the essentials of Peak Leadership through "The Apprentice." The words might even sound a little bit familiar …

You're fired! ■

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* From *Good to Great* by Jim Collins

The Concept of Customer—Revisited

For years, FMI has used a simple phrase to describe the workings of the construction paradigm: Get Work, Do Work, and Keep Score.

By Hoyt Lowder and Bob Leibforth

Ten years ago we wrote "The Concept of Customer: A Changing Construction Paradigm," published in FMI's *Contractors Management Journal*. Looking back, it was a time of change. The AGC established the Marvin Black Award for project partnering in 1992; some contractors were experimenting with quality initiatives based on Baldridge or ISO 9000 criteria; the use of computers was expanding from financial functions to estimating, scheduling, operations, and communications; and e-mail was still something most organizations didn't have!

The economy was strong, and all signs pointed to long-term growth. While the world-wide web wasn't reality for most of us, the commercial sector economic boom was certainly being driven by energy, technology, and communications. Public sector work was driven by a growing school-age population; environmental concerns over water, wastewater, and hazardous waste-site remediation; as well as investment in neglected transportation infrastructure including roads, bridges, and airports.

The Concept of Customer was written to explore a potential vision and set of guidelines for doing business. It asked questions. It provided a framework for possible answers. Read the article as it appeared in February 1993, and we'll join you at the end to share our perspective on The Concept of Customer.

THE CONCEPT OF CUSTOMER: A CHANGING CONSTRUCTION PARADIGM

Customers are integral to the construction process, as they are to any profit-making business. Yet, the idea of customers, of having customers, satisfying customers, and delighting customers is foreign to many contractors. As a result of their project focus, technical orientation, and short-term profit objective, contractors sail through storm-tossed economic seas like sailors in a rudderless boat — with no feeling of comfort or control, knowing that the only choices are to ride it out or disappear.

Is this the way it has to be in construction? Does our perception of construction, our Construction Paradigm, affect our ability to see another way? Are there alternative sets of rules we could apply that would impact the way we do what we do? Are there frameworks that would allow us to change our focus, our orientation, our goals, and allow us to have more control of our destiny?

We believe there are other ways of "seeing" construction — and one of these new paradigms we call The Concept of Customer.

The value of paradigms is that you don't have to reinvent the wheel each time you face a decision.

THE ROLE OF PARADIGMS

In a recent television advertisement, a teacher tells his young students who are coloring a picture, "Stay between the lines; the lines are our friends." In a very real sense, paradigms define the lines within which you live and work. And, those lines are your friends (at least sometimes). Joel Arthur Barker, in his video, "The Business of Paradigms," describes paradigms as a set of rules that not only set boundaries but also tell you how to be successful by solving problems within those boundaries.

Paradigms provide examples or patterns that you can follow. The value of paradigms is that you don't have to reinvent the wheel each time you face a decision. You base decisions, values, attitudes, and beliefs on decisions, values, attitudes, and beliefs that have served you successfully in the past. The problem with paradigms is that they become comfortable. As you apply a paradigm and experience success, you grow and expand the paradigm, and it becomes a complete environment in which you function. It affects the way you see, the way you organize your work, even the way you think and what you believe.

When told the peasants had no bread, Marie Antoinette reportedly said, “Let them eat cake.” Supposedly, that was what she would have done if she herself had no bread. It was the right answer within her royal paradigm. She couldn’t conceive of a life where no bread meant no food.

THE CONSTRUCTION PARADIGM

Construction is a huge industry, and there are many paradigms, many patterns and examples (some better than others). For years, FMI has used a simple phrase to describe the workings of the Construction Paradigm: Get Work, Do Work, and Keep Score. Let’s look at these three processes, and see how they have shaped our companies and our industry.

Before we start, we should define *work*. What is work? If we want to get it and do it, we ought to describe it. Work is the technical process of construction. Work is hanging steel, pouring concrete, excavating, and painting. Work takes place on a jobsite. Craftsmen, foremen, and superintendents do work.

Bidding is crucial in one respect: It is efficient for both the owner and contractor when they see the goal of the process as a contract to build a project.

GET WORK

If work is the technical construction process, *getting work* means getting an opportunity to do work — it means winning a project. The Construction Paradigm is focused on projects. Get Work is the same as Get a Project.

A *project* is a short-term activity of finite duration. Even a two- or three-year project is short-term, considering the life of a company, and most projects are much shorter than that. If you are a business person, and your job is to get a deal that will last only a short time, how much are you going to invest in getting it? No matter how good the deal, you can’t afford to invest too much — it’ll soon be over.

Short-term deals require a fast, efficient work-acquisition method. Neither the buyer nor seller wants to waste time or money. In retail, the system that has evolved in America is a set price marked on the item — take it or leave it. In the commodity markets, auctions quickly determine the buyer. In construction, we typically do it by bidding. In theory, there are a million ways to buy construction services. Bidding is crucial in one respect: It is efficient for both the owner and contractor when they see the goal of the process as a contract to build a project.

Get Work is a short-term attitude, and it has driven our industry's primary work acquisition process. Not surprisingly, getting work is the overriding goal of a construction organization.

DO WORK

Do Work describes the efforts of the field forces on the jobsite that result in a road, a building, or a dam. The tenets of project management are to meet all project specifications, reduce project costs, and increase project profits (under budget, ahead of schedule). In essence, we want to do the least that we can and still get paid. Our Construction Paradigm drives our behavior. If a project is a finite, stand-alone activity, to get it, you have to be the low bidder. To survive, you have to make a profit. You *have* to reduce costs and increase profits on each project. Doing work is a secondary focus of a construction organization. It is the primary purpose of a contractor, but, as they say, nothing happens until the sale is made.

KEEP SCORE

When Dr. Emol Fails, the founder of FMI, began to work with contractors in the early 1950s, the concept of *keeping score* was a new paradigm for many contractors. Now it has become the third facet of the Construction Paradigm. It reflects the internal focus of most contractors — short-term profit.

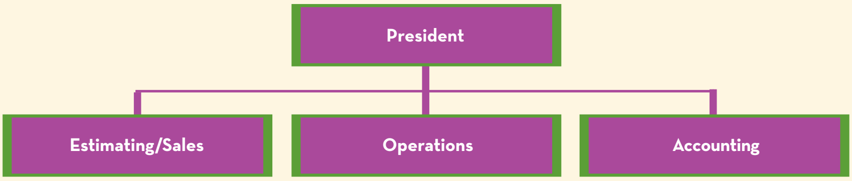
For most contractors, keeping score is simple (although not necessarily easy): financial performance by project (job cost) and financial performance by division and company (income statement). A project that exceeds estimated gross margin is a great project; a month/quarter/year where net profit exceeds budgeted net profit is a success. Usually, organizational bonuses tie to financial performance.

ORGANIZATIONAL STRUCTURE

Given the validity of the Construction Paradigm, you would expect the organizational structure of construction firms to mirror the paradigm. Does Get Work, Do Work, Keep Score sound something like Estimating, Operations, and Accounting? You build your organization to perform the functions you see as central to your success. And on top of the organization, who is the one person your organization can't do without — your president! (See Exhibit 1.)

Exhibit 1

Organizational Structure



THE HUNDREDTH MONKEY: A PARABLE[1]

A number of years ago, scientists were studying monkeys on a small island in Asia. Monkeys are social creatures: they mate and live in extended families that are part of tribes. Some tribes can number in the thousands. The tribe these scientists were studying had several thousand monkeys.

Most monkeys are also vegetarians, eating mostly leaves, fruits, plant roots, and nuts. The scientists started putting sweet potatoes in feed stations. The monkeys liked the sweet potatoes, but they apparently didn't like the gritty sand on them.

One day, one monkey took a sweet potato to the water and washed the sand off before eating it. The next time this monkey had a sweet potato, it did the same thing — took the potato to the water and washed it. None of the other monkeys had ever done this before.

Within a few days, another monkey started doing the same thing. You know the saying, "Monkey see, monkey do." Gradually more and more monkeys started imitating this washing behavior. Soon there were 50, then 75, and then 95 monkeys washing. But thousands of other monkeys didn't; they still just ate the sandy sweet potatoes.

Then a very strange thing happened. When enough monkeys — perhaps 100 — had adopted this strange, new washing behavior, all the rest of the monkeys in the tribe adopted it almost at once. It was as if someone had waved a magic wand. From a tiny group to the entire tribe, their behavior changed practically overnight, and the culture of that tribe was changed forever!

Change doesn't happen overnight, all at once, or without any warning. Nor does it happen slowly, moving at a constant rate from initial idea to total acceptance.

THE PARABLE LESSON

All good parables teach us something about ourselves and the world we live in. The Hundredth Monkey is no exception. Change doesn't happen overnight, all at once, or without any warning. Nor does it happen slowly, moving at a constant rate from initial idea to total acceptance. Change starts slowly and moves slowly until some critical mass is reached (the Hundredth Monkey). Then, it becomes the new norm.

Look at one of the dominant things in your life, fax machines. Fax technology has been around and demonstrated for more than 50 years. When did it become essential? We can't answer that in terms of a date, but I can tell you that it became essential when the Hundredth Monkey decided to buy a fax machine. Did the "instant" success of fax machines surprise you? If it did, it was because you were unaware of those first "monkeys."

What does this have to do with construction? From our position within the industry, we have seen changes in the behavior of owners who buy our services, and we believe these changes are quickly reaching a point of critical mass — the Hundredth

Monkey. Owners and buyers of construction services will drive the changes we see coming for construction. No longer satisfied by low-bid, adversarial relationships characterized by claims and lawsuits, owners are finding a better way. You may feel secure in your current low-bid market as a highway contractor, general contractor, or subcontractor. But when the market change comes, you may have no market. Do not say you were not warned.

Customers are people, not technical activities. The focus of The Concept of Customer is on relationships, and that powerful focus moves contractors from providers of things to partners, sharing mutual success with their customers.

THE CONCEPT OF CUSTOMER

There is no law that dictates the Construction Paradigm of Get Work, Do Work, and Keep Score. Many companies have already embraced a different vision — a new paradigm for providing construction services. We call this vision The Concept of Customer and it, too, is described simply: Get Customers, Delight Customers, and Measure Performance. Let's see how changing the paradigm affects how we do business.

Again, if we are going to get and delight something, we should describe it. The most important aspect of this paradigm is people. *Customers* are people, not technical activities. The focus of The Concept of Customer is on relationships, and that powerful focus moves contractors from *providers* of things to *partners*, sharing mutual success with their customers.

GET CUSTOMERS

Getting Customers involves the development of long-term relationships based on trust and respect. Good customers last a long time, so you can justify making a significant investment in building that relationship. The focus in getting a customer is on what they want and need — on satisfying their goals, stated or unstated.

What do customers want and need? Saying a customer needs a building, or an office, or a bridge reflects thinking under the old paradigm. Customers want "a supportive environment that enhances their ability to achieve *their* objectives and satisfy *their* customers."

Think about that for a moment. Customers want an *environment*. In the past, we've provided a building. How can we provide "an environment?" Through design? Facilities management? Maintenance?

It's a new paradigm, and it will require new ideas and a new way of thinking. We expect it to result in contractors, through joint ventures or diversification, becoming more involved with customers on a continuing basis — building, maintaining, and ensuring the customer's desired environment.

Focusing on specific customer segments will also drive increased investment in technology to satisfy specialized customer needs. However, the primary research investment will be in understanding those customers we choose to serve. As an industry, we will find we know almost nothing about our customers today — or about our customer's customers. The more we learn, the better positioned we will be to satisfy their needs.

The primary work acquisition method under The Concept of Customer includes highly qualified short lists and negotiated bids. Will cost be important? Of course. Will there be competition? Of course. However, the emphasis will be on value — not the low bid — and it will be in everyone's best interest for all parties to win. Perhaps surprisingly, I see Getting Customers as a secondary focus of the organization.

DELIGHT CUSTOMERS

Getting Customers is a secondary focus because the primary focus of everyone in the organization will be to *delight the customer* — not to satisfy the customer, meet specifications, or perform in an acceptable manner — but to delight them. Build structures that are defect-free, worry-free, and provide services that exceed expectations and enhance the customer's ability to meet their objectives. Can you envision that?

Delighting customers involves everyone in the organization. Doing work focuses on the field. A great many people in accounting, estimating, and support positions are left out of the primary purpose of a construction company and believe the field is responsible for satisfying the customer. Under The Concept of Customer, the primary purpose of the organization is to delight the customer, and that is everyone's responsibility.

When was the last time you were delighted when dealing with another company? We'll lay odds that your delight came not from the functionality of a product, but from something a person did for you — something that told you they cared and they were concerned with your happiness.

Teaching your customers about you is vital if your business is customer delight.

Customer delight is caring people wrapped around a quality product.

Educating and training our customers is a vital function. You cannot delight a customer who doesn't know all your capabilities; doesn't understand how to best work with you; and doesn't "see" how you fit into their vision of the future. As they learn about you, they see new applications for your capabilities, new opportunities for you to delight them. Teaching your customers about you is vital if your business is customer delight.

PERFORMANCE MEASUREMENT

Keeping score remains with us under The Concept of Customer, but performance measurement expands that role. You have to measure performance that is outside financial statements. So in addition to job cost and income statements, which remain vital, you have additional measurements, such as:

- Image survey results
- Customer evaluations
- Number of long-term relationships
- Percent of repeat business
- Internal measures of conformance to customer requirements

The intent is to identify and measure external, customer-focused activities that impact your long-term ability to delight your customers. No longer is a profitable project a good project by default; a profitable project that costs you a long-term relationship is a poor project. A project that exceeds estimated gross margin, receives outstanding customer evaluations, and results in a long-term relationship is a good project; a year where gross margin exceeds budgeted gross margin, image survey results improve, repeat business is up, and internal processes have continuously improved is a good year.

No longer is a profitable project a good project by default; a profitable project that costs you a long-term relationship is a poor project.

ORGANIZATIONAL STRUCTURE

What about the organizational structure under The Concept of Customer? Will it stay the same? Probably not. The traditional structure best serves our internal needs; new structures will develop to best serve our customer's needs.

We expect to see structures where people with different areas of expertise (operations, estimating, accounting, marketing, engineering, design, etc.) are grouped together in teams focused on developing relationships, delighting customers, and measuring performance for a specific market — not a matrix organization, forming temporary project teams, but conceptually more like a series of small, self-supporting companies.

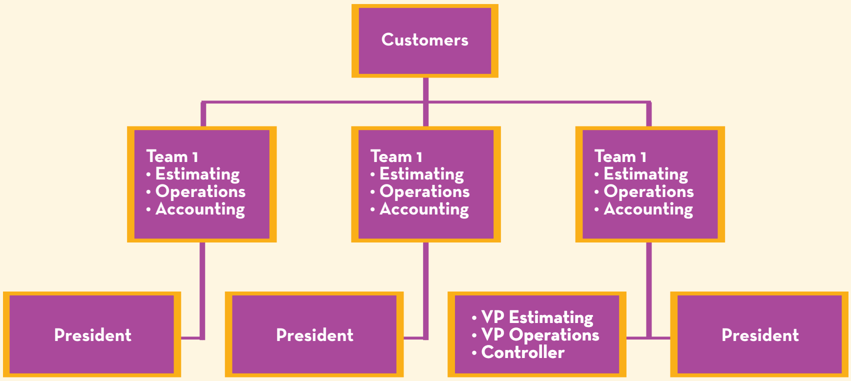
Of course, on the top of your new structure would be, again, the one person your organization cannot do without — your customer. (See Exhibit 2.)

HOW DO YOU GET THERE?

Like many other things in life, it is easy to lay out a path to travel, and much

Exhibit 2

New Organizational Structure



harder to make the journey. All journeys of faith begin with one thing — a vision of something better than what exists today. Your journey begins with your vision and your commitment to making it happen.

Visions go nowhere without a framework — a set of goals along the path and a method of reaching them. Strategic planning gives you the framework required to travel the path, and provides you with an opportunity to communicate your vision to your management team. You can't "sell" your vision, but by talking about it, you give others the opportunity to align with your vision — to "see."

An integral portion of your strategic framework must be commitment to continuous improvement. You cannot succeed by doing what you've always done, the way you've always done it. You cannot delight customers by being just the nicest, kindest, and most caring organization. You have to be the best. Continuous improvement in every part of your organization is essential. It also allows you to share your vision with each person in the company — it allows each of them to "see."

Customer delight begins with customer selection. You cannot delight every customer; you cannot be all things to all people. To truly delight customers, begin with a marketing focus that identifies:

- What you want to do
- Whom you can best serve by doing it
- Where you can best serve them

The idea of chasing a project, of doing anything for a dollar, belongs in the old paradigm. Delighting customers requires you to be the best, and you can only be the best of a few different things. Find those few things, and use your resources to identify the true wants, needs, and desires of those customers. Real understanding of your customers' vision will allow you to delight them in many ways.

Even with customer selection and understanding, you have to measure your ongoing ability to exceed expectations. Focus your continuous-improvement process on those internal activities that impact customer delight. The idea is to identify problems early and solve them — and not wait until your customer notices and tells you through a complaint or evaluation.

Finally, you have to measure performance. Beyond financial statements, incorporate other appropriate measures that identify how you are doing in the eyes of your customers. Work to make these measurements as accurate and timely as financial information. You *can* do it. Use these measures in your performance evaluations and compensation programs. You can't claim a commitment to customers while rewarding only short-term financial performance.

There is recognition among owners that relationships are important, quality is a requirement, partnering is essential, and low-bid is not low-cost.

THE FROG IN HOT WATER: A FINAL PARABLE

While working with frogs to measure the effects of changes in external environments, researchers discovered something startling. If you take a frog out of a pan of lukewarm water and place it into very hot water, it will leap away. However, if you take a pan of lukewarm water and heat it slowly to a boil, the frog will sit there and die, never for a moment believing that it is in danger.

Why? Scientists theorize that in a frog's natural environment, a sudden change of temperature is recognized as a danger, and the frog's response to danger is to jump. A slight increase in temperature, however, is not recognized as dangerous, so the frog stays where it is. The frog paradigm says that a small change in temperature is okay, so the frog sits as the water gets hotter and hotter, and then it dies.

Things are changing in our environment, too. There is recognition among owners that relationships are important, quality is a requirement, partnering is essential, and low-bid is not low-cost. Like the researchers watching the monkeys, we don't know when the change will occur, but when it does, it will appear to happen overnight. Unlike the monkeys, there won't be sweet potatoes for everyone. Some of you will have nothing to wash.

Like the frog, some of you will wait until it's too late — sitting in your pan of boiling water, refusing to acknowledge the changing environment. Unlike the frog, some of you will jump, while the water is just getting warm.

The questions that beg to be asked after 10 years are: What happened? Is there a new paradigm in our industry? Is the old paradigm dead? And perhaps most importantly, does a customer-focused paradigm hold up in economic hard times? And some of you may be thinking, "Paradigm — what a 1990's concept!"

It's fair to say, in terms of monkeys, the 100th monkey has not adopted The Concept of Customer. The Get Work, Do Work, Keep Score way of doing business remains alive and well in the new millennium. There has been no "overnight" conversion to customer delight. However, we feel more strongly than ever The Concept of Customer is the vision for contractors that will be most successful.

One of the primary determining factors that differentiates the customer-focused contractor today is experience. The more detailed the better. Our contractor customers who are best-in-class in this arena incorporate direct customer feedback, win/loss, and individual performance into every proposal and presentation. Key results that affect the customer expectations and outcomes are described in detail from the very beginning of every project. Managing expectations (customer training and education) is a part of every successful long-term, mutually beneficial relationship.

Realistic reporting of results and expectations from relationships comes from consistent commitment to predictable and dependable processes that are measured and reported. One firm recently won a $5M project by showing the owner his past performance of win/loss and noting that he could no longer continue to give proposals without some success.

Owners have grown tired of the standard EMR and safety-plan discussions in presentations. They want to know the specifics of what you have seen and addressed on their jobsites. Further, they want to know that you have taken the specific experience from this type of work on past projects and are using this experience to avoid injuries on their current project(s).

In addition, owners really want to know from GCs that your firm has visibility and quantifiable performance history with subcontractors. A "good relationship" is an insufficient description with the more sophisticated owner today.

Over the past several years, deltas on fees of 30% to 40% between low bidder and the winning fee were determined by the demonstrated "best" relationship. This really means best experience and insight into the customer-specific situation. Very few — less than 10% — of the best-of-class builders have a real-time customer satisfaction system. Few — less than 15% — of the builders are doing any kind of real sales forecasting and planning. The best only do some revenue forecasting.

Finally, technology applications and successful collaborating experiences have proven that there are processes that can be used to produce repeatable, measured performance, which is better than is realized by the traditional one-off approach. These experiences are building the critical mass required for "the 100th Monkey" and the shift to more effective relationships among all parties in the overall construction processes.

There are some changes we would make to the article if we were writing it today. There are two areas that are mentioned, but not stressed sufficiently: diversity in markets, and the need to remain cost competitive.

The Concept of Customer could easily be interpreted as a process that narrows your focus to one market and one group of customers that you can best serve. As many of us have learned over the past three or four years, serving one market can be a dangerous situation, regardless of how robust it appears.

Successful customer-focused organizations have identified several markets they want to serve, and developed teams with specific skill sets to serve those markets. Just as you wouldn't want 100% of your work with one customer, you don't want 100% of your work in one market segment. Identifying diverse markets, such as a mix of education, commercial office, health care, and public buildings will help you to maintain revenue balance as customer investment waxes and wanes. The management challenge is the allure of the hot market — with high margins and more work than contractor availability, it's easy to find more and more of your resources pulled from your other, lower-margin market sectors. Makes sense, until the hot market crashes. It takes a special talent to maintain balance in your organization when you have a hot market situation — it's called leadership.

Identifying diverse markets, such as a mix of education, commercial office, health care, and public buildings will help you to maintain revenue balance as customer investment waxes and wanes.

There is nothing in The Concept of Customer necessarily to drive you to a single market, but today we would have emphasized the point in greater detail.

Likewise, The Concept of Customer does address the need to remain cost competitive — delighting customers will always require providing quality at a fair price … and your customer's perception of a "fair price" will always, to one extent or another, be market-driven. We have seen, however, some fine contractors who, in their efforts to be customer-focused in booming economic times, lost their ability to compete on a cost basis.

It is another management challenge to maintain a focus on cost when your customers are willing to pay higher and higher prices for your services. However, when the economy cools, and there is a need to replace negotiated revenue with more bid-oriented work, successful customer-focused organizations are able to respond.

Customer focus and customer delight can never be an excuse for bloated organizational staff, inefficient operations, ornate buildings, and all the trappings that tend to go with construction organizations caught up in a misguided vision of success. Creating delighted customers does not require added cost — it requires very careful analysis of just what it will take to delight your customers. Once identified, customer delight requires you to do those things better and better — and to your customer, that normally means doing those things with fewer problems, faster, and at a lower price.

An organization committed to customer delight should become, over the years, more efficient from a cost standpoint than an organization competing on price. Competing on price only requires your costs to be about the same as your competition's cost — delighting customers requires you to continuously improve in all areas, including lower cost. In retrospect, we don't believe we made this point clearly enough in 1993.

All things considered, we continue to believe in The Concept of Customer and the need for construction to join the ever-growing list of industries finding success in the market-driven economy. Some of the examples may be dated, but the idea is as fresh as it was in 1993 — focus on your customers and incorporate measures of customer delight in your performance management process. ■

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[1] Reprinted with permission from *How to Provide Excellent Service in Any Organization* by Jeffrey E. Disend, Chiltion Book Company, 1991.

Seven Reasons Good Design Matters

It can easily be argued that quality construction can only happen when coupled with good design. The following piece highlights the benefits of good design.

By Peggy Lawless

Architecture influences our day-to-day lives. Good design reduces stress, helps orient, increases a sense of security, enhances health, facilitates learning, stimulates productivity, and fosters community. Bad design has substantial psychological, social, and economic costs. This article summarizes the latest scientific studies on how design affects our minds and bodies.

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1. GOOD DESIGN REDUCES STRESS.

Studies have shown a link between lower stress and:

- Daylighting
- Access to, or views of, nature
- Sense of control over privacy, sound, lighting, and temperature
- Positive distractions
- Opportunities for social support

Research indicates that our built environment promotes well-being when design gives us:

- Opportunity for spontaneous social encounters
- Freedom to move from solitary to group interaction

- Opportunity to engage in creativity, exploration, and cooperation
- Opportunity for regular exercise
- Noise levels not above those found in nature
- Meaningful change and sensory variability
- An interesting visual environment.

2. GOOD DESIGN HELPS ORIENT.

Signs and maps help people get their bearings, but a building's design can orient people at a more immediate, intuitive level.

Humans are hardwired to search for cues in their environments to help them find their way. As the built environment becomes more complex, difficulty with orienting and navigating increases.

Research has identified ways that design can support wayfinding:

- Create recognizable entrances.
- Make elevator lobbies visible from the main entrance.
- Avoid circular designs; use central corridors and right-angle turns.
- Differentiate regions with unique colors, flooring, and lighting.
- Provide landmarks or other distinctive points of reference.
- Use sight lines to show what is ahead.
- Provide destination cues every 125 to 150 feet to reassure people.
- Build main corridors wider than secondary pathways.
- Design public waiting areas that are visually open to corridors.
- Distinguish public from non-public corridors by using varied finishes, colors, and lighting.
- Harmonize floor numbers between connecting buildings.

3. GOOD DESIGN INCREASES SAFETY.

As we walk through a city or a building, some areas feel safer than others. A terrace separated from the sidewalk by a flowerbed gives us a sense of protection. A brightly-lit lobby full of activity attracts us. A corridor with no visible exit makes us nervous.

These situations illustrate the three basics of Crime Prevention through Environmental Design (CPTED):

- Territorial reinforcement uses physical features to create a sense of ownership.
- Natural surveillance requires design features that put "eyes on the streets."
- Natural access control guides people to entrances and exits and discourages access to private areas.

Research has shown that CPTED can be as effective as traditional forms of crime prevention including fencing, security cameras, and lighting.

Consider these proven techniques for creating safer built environments:

- Place windows overlooking public areas.
- Reduce areas of concealment.
- Design spaces for casual socializing to reduce anonymity.
- Ensure entries are visible.
- Create transitions between public and private areas using symbolic barriers.
- Place restroom entrances in visible areas.
- Develop floor plans with good sight lines.
- Separate incompatible uses such as apartment windows and parking lots.

4. GOOD DESIGN ENHANCES HEALTH.

Evidence-based design of hospitals has resulted in lower staff turnover, greater patient satisfaction, reduction in pain-medication requirements, and lower variable operating cost per patient.

Design elements that contribute to a healing environment include:

- Visual privacy
- Patient control of temperature, sound, and lighting
- Overnight accommodation for family caretakers
- Outdoor garden areas
- Fountains and fireplaces
- Warm and cool color schemes that encourage the desired activity level
- Artificial lighting in the 3,500 range
- Indirect lighting and daylighting
- Access to nature, either directly or with a window view of nature
- Places for culturally-sensitive social support
- Avoidance of sense stressors: glare, noise, smells, vibrations

5. GOOD DESIGN FACILITATES LEARNING.

The design, construction, and maintenance of school facilities can affect the health and learning of students. The quality of the school environment can help:

- Increase students' attention
- Improve academic performance
- Reduce stress
- Encourage positive social interactions
- Improve student classroom behavior
- Reduce absenteeism
- Increase safety

School designs can enhance students' performance and well-being by incorporating:

- Daylighting
- Views of nature
- Maximum background noise of 35 decibels
- Good ventilation

- Temperatures between 68 and 74 degrees
- Smaller buildings (300–400 students for elementary schools, under 1,000 students for high schools)
- Gathering areas and quiet study areas

6. GOOD DESIGN STIMULATES PRODUCTIVITY.

Few inhabitants of gray-cubicle stockyards would say their workspace stimulates productivity and creativity. When asked to imagine their ideal work environment, office workers describe spaces that are congenial, homelike, private, and light-filled.

Research shows that workplaces are more effective if the design incorporates:

- Individual control of lighting and temperature
- Access to views and natural lighting
- A mix of private and collaborative spaces
- Moderated noise levels
- Magnet areas that draw people together
- Ergonomically designed furniture
- Good air quality
- Places to relax and recharge
- Flexibility of workstation configuration

7. GOOD DESIGN FOSTERS COMMUNITY.

Architecture has the power to connect — or isolate — people. Design that encourages frequent informal contact satisfies our basic human need for social interaction.

In apartment buildings, neighbors are more likely to form social ties if they use the same entrance or path. Studies demonstrate that people living in homes without a front porch are less likely to know and talk with their neighbors.

Research shows that the following characteristics of built environments encourage social interaction:

- Easily accessible; connected to surroundings
- Contain activities and food to attract people
- Have comfortable seating
- Include greenery, water, or a focal point
- Encourage spontaneous interaction ■

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The War for Talent

As demographics shift and developed talent dwindles, recruiting and retaining "A" candidates will become increasingly critical to the survival and sustainable success of construction organizations.

By Mike Perriccio

We often ask leaders of an organization during strategic-planning sessions about their turnover and retention rates. Often, the responses are limited to, "Well, our turnover is low." Answers to follow-up questions, embarrassingly, are often unknown. When asked about retention, the answers are worse. Responses include, "Oh, our people never leave," or "We keep our people happy so they stay." The fact remains that a company's human resource — its people — is often seen as an afterthought.

In these situations, we take the opportunity to strongly encourage our clients to rigorously gather data and conduct analysis on turnover and retention. Oftentimes, the results are eye-opening. Generally, there are groups of employees with positive retention results. Companies tend to focus on these rather than on the groups that are bleeding the company. In our industry, certain management positions generally have lower turnover and higher retention, giving senior management a false sense of security. But, emerging leadership, such as front-line manager and laborer turnover rates are astronomical. Many construction companies consider this a cost of doing

Exhibit 1
Employment Costs
Dollars

	Recruiting Costs	Hiring Costs	Training Costs	Total Costs
Management Positions	2,200.00	2,400.00	3,000.00	7,600.00
Hourly Positions	1,300.00	800.00	1,000.00	3,100.00

Note: Recruiting costs include: advertisements, recruiter fees, job postings, etc.
Hiring costs include: assessments, interview time, background checks, etc.
Training costs include: orientation, travel, trainer/mentor time, materials, and lost productivity

business. They are exactly right. A HUGE cost of doing business. (See Exhibit 1.) To calculate what your company's turnover cost is in a year, multiply the number of separations for both management and hourly employees by the "Total Costs." The number will alarm you!

Another area we often inquire about is employee satisfaction. Often construction companies don't try to find out if their employees are satisfied because they fear finding out that there are problems that need addressing. In addition, it takes too much time and money to make employees happy. The paradox is that it costs more time and more money by assuming they are happy and accepting turnover as "a cost of doing business that will never go away."

Often construction companies don't try to find out if their employees are satisfied because they fear finding out that there are problems that need addressing.

At a minimum, construction companies should know their historical turnover rate and measure it on an annual basis similar to other financial metrics. Furthermore, construction companies should understand what this "cost of doing business" really is in their company. For example, one mistake by an inexperienced estimator cost one of my clients $65,000 for re-design, materials, and labor. That $65,000 represented a significant portion of the potential profit from the project. In another case, when I calculated the historical turnover expense of another client dating back five years, they were shocked to see that they had a "cost of doing business" that exceeded $500,000 annually. That was a conservative estimate of expenses associated with turnover, such as recruiting, drug testing, hiring time, criminal checks, training, managers' training time for training etc.

THE WAR FOR TALENT

The war to find and keep talent should be a major part of any organization's business plan. Analyzing construction companies that have struggled with management succession and gone out of business, we see that there was a clear lack of talent and leader development. As a construction company grows both in revenue and in number of employees, a dedicated resource should be available to help with human-resource issues facing the business. This position is typically viewed as extra overhead, and therefore, it is not typically staffed. The smart construction company sees this position as a critical operations position, critical to the recruitment, training, and retention of employees. It is a battle within the war for talent. This resource does not have to be full-time until it is necessary. What's important is having someone close to the business to do the crucial upfront work, allowing project managers and foremen to focus on running their projects effectively. It is essential that management ensure the focus of this position is strictly limited to those factors impacting the business the most — recruiting, hiring, training, and retaining employees. Too often, the human-resource professional is made busy with non-value-added administrative tasks.

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The demographic factor in the war for talent is increasingly critical. Look at some of the demographic changes facing the industry. Baby boomers comprise the largest segment of the population — 28%. That accounts for more than 78 million people. Over the five years 2005–2010, the population for ages 10–24 will increase by more than 2.5 million people. The age group between 43–65 will increase by 8 million people. However, the critical area that will impact our industry the most will be in the age group 25–42, which will decrease by more than 1 million people. What does this mean to you? The age group from which we would typically recruit new hires is decreasing for the first time in our generation. This means that other companies will try to lure away your talent to join their company. It is a whole lot less expensive to pay $5,000 to $10,000 more for an experienced project manager who can save the company 10 times that on a project, than it is to go out and recruit, hire, and train a new employee. Thus, the need to be constantly listening to your people will become increasingly important to ensure they are not

Exhibit 2

Demographics

Non-traditional and single-person households will increase

Non-family Households	
Decade	**Percent Increase**
1970	18.8
1980	26.2
1990	29.2
2000	31.2

Workers over the age of 55 are the fastest growing segment over next few years

Forecasted Population Growth 2002–07	
Age	**Percent Increase**
Under 5	3.2
5–14	-1.0
15–24	6.6
25–34	1.0
35–44	-5.9
45–54	10.7
55–64	**23.0**
65–74	5.5
75–84	2.4
Over 84	12.4

listening to opportunities that will most likely come their way. Let's look at where the war for talent exists. (See Exhibit 2.)

RECRUITING PLAN

Recruiting starts with strategic intention and infiltrates the organization. Once a firm has crafted its growth strategy, a "needs assessment" should take place. This needs assessment must include evaluation of the company's ability to handle the probable results of this growth strategy. For example, ABC Company has grown 7% annually and set a goal of hiring 25 new project managers and project engineers. During the third quarter, the company leadership is feeling good because they have hired 17 of the 25. When asked how many have terminated, the answer is nine. Although they have hired 17, they failed to take into account the historical turnover with those positions. Therefore, the number of net hires works out to be actually eight, not 17.

Companies also fail to recognize that if they are currently struggling to fill their open positions, any substantial growth, will put them even further behind with hiring. If ABC plans to add a net total of five projects in 2005, they should already be hiring for them. The average lead-time to hire a project manager or project engineer is more than 90 days. Then, the learning curve begins. The lesson learned is that companies need to make recruitment a proactive strategy and not a reactive one. They must analyze their own historical recruiting process (lead time to hire), evaluate their turnover by position classification, and understand their net hiring goals.

Recruiting starts with strategic intention and infiltrates the organization.

Another factor supporting retention is compensation. Periodically, companies should ensure that their compensation strategy is in line with the behaviors of the competitive market. Wage surveys alone are a thing of the past. Companies must determine the total replacement cost for the position, not just an annual salary. FMI recently worked with a general contractor whose estimating department made continuous financial mistakes. The company figured that the estimating mistakes represented a direct loss of about 5% of the project. Multiplied by two to three projects, this figure becomes paralyzing.

The company was typically paying their estimator around $70k. The company decided to invest another $20k to hire a more experienced estimator, which added about $200k to their profit line. The company realized that they must spend a little more for the right "talent" to reap large financial benefits.

Make sure you are offering incentives to your best recruiting tool — your current workforce. Make it worthwhile for them to recruit for you.

Analyze your own estimating weaknesses. What does a major league baseball team do in the off-season when they analyze their talent? They figure out what key position players failed to perform up to expectation, analyze what talent is available in the minor leagues, and finally, they analyze how long it would take that minor-league talent to make an impact in the big leagues. If the answer is reasonable, they will train, develop, and move that talent accordingly. If not, they look to the marketplace to find the best fit for the organization. Do they spend more time finding "A" talent? You bet. However, it's not the cost but the overall results that count.

Analyze your current talent. Review the core competencies of your key positions. Look for the things that create success in your company — financial knowledge, leadership, customer relations, technical skills, etc. Rate your players using a consistent rating scale. Forecast your project needs. Simulate succession-planning strategies to determine what openings future promotions will create. Assume a historical rate of turnover. Too many companies focus on just senior management when it comes to manpower or succession planning when in fact, the next level, operational leadership, is equally important.

Lastly, tie your recruiting strategy to your marketing plan. Brand the company according to the marketing slogans and ads that your customers see. Notice how often other companies tie together their marketing strategy and their people strategy. This is an effective way to provide both prospect attraction and people attraction. Make sure you are offering incentives to your best recruiting tool — your current workforce. Make it worthwhile for them to recruit for you.

THE HIRING PROCESS

Next, let us look at your hiring process. While many new tools allow companies to be more sophisticated in their hiring process, companies should also remember to keep it streamlined and eliminate bureaucracy. When evaluating your hiring process, pay careful attention to how long it takes to interview, assess, and ultimately extend an offer once you have identified a candidate. Depending upon the level of position, this range should be anywhere from one to three weeks, depending on travel logistics. It is a good idea to have an interview team for key positions. Try to have the same people interview and assess candidates. This investment will yield high returns.

The best employee candidates are interviewing your company at the same time you are interviewing them. The current generation of talent sees their company as an extension of themselves. Therefore, a company who interviews a candidate and offers the job the same day is sending this message, “We are desperate.” It should be a red flag to the company as well if the candidate says “yes.”

Your company should have an outline of interview questions for each interviewer. Most companies fail to do this and therefore interviewers ask repetitive questions. Candidates will think you are disorganized and wonder how disorganized you are in your operations. Give each interviewer the freedom to interview with their style, but ensure that they have some specific, standard questions framed to achieve behavioral responses. Use specific company-related role-plays and experiences that seek to find out how the candidate thinks and analyzes situations. Take a look at your mission, purpose, and values. Base interview questions and role-plays around these key themes. Remember, “hire soft and train hard.” This means, hire for character and talent, and then train your new hires rigorously.

DEVELOPING YOUR PEOPLE

Developing the talent in your company will not just happen over time. Research has shown that in the construction industry we train our new hires tremendously the first three years, but training drops dramatically as one grows throughout the organization. Most of the training during the first few years is technical in nature or concerns management and supervisory skills based around planning, organizing, and controlling. What most companies fail to do is develop future leaders. This is an epidemic failure in our industry. Best-in-class companies have realized this and undertaken leader-development initiatives to secure the future success of the company.

Development should be focused on leadership skills as well as management skills. Again, you probably are providing the management training, but make sure you are monitoring your review on that skill investment. Short-term ROI can be determined more often in technical skills and management training, which is one of the reasons it is usually completed in the first few years of employment.

You don't have to be a large company to invest in leader development. Quite the contrary, larger firms have a deeper bench strength, yet they, too, invest in leader development. Smaller companies often assume that their emerging leaders are getting what they need experientially. Often, by the time companies are ready for new leadership, they find that their candidates have strong technical skills, but lack the leadership and interpersonal skills necessary to lead divisions, business units, or companies. Many talented managers fail to reach their full potential because they plateau at the technical level and don't develop their interpersonal skills necessary to lead people. (See Exhibit 3.)

Developing your people must be intentional. Senior management must lead this effort by selecting individuals to coach and mentor.

Development plans should begin with the hiring process. Required core competencies should be used to grade the talent of prospects and new employees using some form of a scorecard. Scorecards allow a way of quantifying development and provide a more objective manner to evaluate talent. By separating this development planning and evaluation from compensation increases, a more balanced view of actual needs will emerge. Development plans should be used with your most talented key players, at a minimum. They should be reviewed at least every six months to continue a dialogue as to their current level of satisfaction with their own development.

Developing your people must be intentional. Senior management must lead this effort by selecting individuals to coach and mentor. These individuals will be those

Exhibit 3

Maximized Talent Development

talented leaders, who through succession planning efforts, will rise to leadership positions. Development must also be purposeful. Managers shouldn't just provide direction and development that is simply "lip service." It should be purposeful. What does the individual want out of his or her career? What are the skills wanted to maximize in terms of a productive career? What is the mission you are trying to accomplish within your company? Lastly, it must be personal. If you look at the psychographics of the workforce who have entered the labor market and will be entering the labor market, you will find that they are more demanding in terms of knowing where they are going with their current company. They don't feel as though they should have to wait three to five years between promotions, but that promotions should be based on personal results. They want their supervisors to take the time to continuously communicate and show a vested interest in their careers.

Employee satisfaction survey results consistently show that the top two factors in employees' job satisfaction is directly related to their working relationship with their supervisor and their ability to develop themselves to allow for future advancement. Considering the cost of replacing an employee, the investment in developing your current and emerging leadership is a small investment.

RECRUIT YOUR CURRENT STARS

The following concept creates many sleepless nights for many CEOs. Look at your current talent pool. If you are using succession-planning tools, look at your list of emerging leaders. If not, identify the key talent in your company. This should represent no more than 30% to 40% of your management team. The Gallup Organization wrote a great book entitled, *Soar With Your Strengths.* I say, "Soar with your stars." If you have identified the right people, you have identified those individuals who will determine your company's success. Once you have identified them, recruit them back to the company. What?

Look at them as though they work for your key competitor and you want them in your company. Coincidentally, if you don't look at them in this light, you might soon see them wearing your competitor's golf

Considering the cost of replacing an employee, the investment in developing your current and emerging leadership is a small investment.

shirt. Then, sit down and interview them. Find out what is going well and what could be better. Find out what makes them "tick." Find out what's on their minds in terms of other career opportunities. Finally, find out what it will take to keep them with you for the long-term.

Most people think that this requires paying people more money. In some cases, it might. In those cases that require additional compensation, the majority of the time it reflects a below market-level compensation structure in the first place. You'll be very thankful that you took the time to increase a key player's compensation by a few thousand dollars rather than suffer the consequences of having him or her leave. In most cases, the star talent will be thankful and satisfied that you care about keeping them in your company. If you remember nothing else about your star talent, remember this: "People quit supervisors, not companies." ■

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The Valuation Trap for Engineers and Contractors

The valuation trap occurs when the value placed on the company exceeds management's or the employees' ability to pay while sustaining a financially strong business.

By Stuart Phoenix and Tony Perrone

Beauty is in the eye of the beholder, and there is nothing quite as beautiful to a business owner as his own creation. Add to that the owner's typical desire for maximum value and it is easy to understand how a business owner's expectation of price in a sale of their business is usually aggressive.

The check on this is found in a third-party sale. A buyer brings his or her own notion of value to the table based on the reality of the marketplace. In a sale to management or employees, this marketplace reality is often not brought to the table, and the engineer or contractor selling his business can fall into the "Valuation Trap."

The valuation trap occurs when the value placed on the company exceeds management's or the employees' ability to pay while sustaining a financially strong business. The eventual result is failure of the company or a necessary sale to a third party. That is not to say there is anything wrong with a third-party sale. However, if a business owner wants his legacy company to continue as a strong independent business, the valuation trap has to be avoided.

Peter Kiewit Sons' Inc. is a great example of a company that has avoided the valuation trap. Peter Kiewit Sons' Inc. has sustained itself as a private company through multiple generations of employee owners. Having more than 1,600 shareholders, Kiewit files an S-1 report with the SEC in which some of its inner workings are revealed. One of the interesting facets of its ownership structure is that the company's valuation methodology for the sale and purchase of stock to and from employees results in a value below book value. Nevertheless, the value of Kiewit's stock has grown over the years as increasing earnings have added to book value in their valuation formula. Employees who are eligible to buy stock like the idea of buying shares at less than book market value. As the company and its stock value grow for many of its long-term employees/stockholders despite the lower valuation formula, those that leave or retire have done so as wealthy people. We would argue that this is one very important reason why Kiewit has been able to more than sustain itself as a private company. Kiewit's ownership arrangement and culture have helped make it one of the most successful companies in the construction industry.

Most business owners only sell or buy a business once in their lifetime. Therefore, unlike designing or constructing a building that they have done hundreds of times, owners come into a sale without a great deal of experience. Consequently, it is not difficult to get off track.

Most business owners only sell or buy a business once in their lifetime. Therefore, unlike designing or constructing a building that they have done hundreds of times, owners come into a sale without a great deal of experience.

The typical valuation traps we see owners fall into (often with the help of professionals) are:

VALUATION BASED ON METHODS NOT RELEVANT FOR ENGINEERS OR CONTRACTORS

For financial professionals, discounted cash flow (DCF) is a predominant method for valuation. The difficulty in applying this method to engineering and construction ("E&C") firms is that it relies on projections for a minimum of five years and up to 10 years or more. Anyone in the industry will attest that just forecasting what revenues and earnings will be over *the next 12 months* can be difficult. In addition, a terminal or sale value at the end of the projection period is estimated; this estimate is often more difficult to make than the projection. Therefore, while the DCF valuation method is used widely for many manufacturing and distribution firms, it is not really applicable to engineering and contracting businesses. There are other exotic methods such as excess earning or dividend capitalization, and many of these have a basis in theory, but in our experience, not in reality for the construction industry. In FMI's experience of numerous acquisition transactions with buyers and sellers, we find that the most relevant methods involve a capitalization of historical earnings, possibly using a one- to two-year forecast, and valuations simply based on balance sheet assets and liabilities. Capitalization methods typically will use a conservative multiple of earnings, which can be derived from a required pretax return on investment of 20–35%. Balance sheet methods rely on the historical accounting net worth (book value) and the book value adjusted for the market value of assets. Asset values are important indicators or benchmarks of value in this industry, as most construction firms have few assets that are unique for their operations. Most can be easily replaced and there is little goodwill beyond tangible asset values. In virtually every negotiation that we have been involved in, the buyer instinctually values an opportunity based on expected return on investment and the underlying value of the assets. Again, the valuation trap for construction industry firms is using methods that do not relate to a rational return on investment and underlying asset value.

COMPARISONS TO PUBLIC COMPANIES

A common method is to take valuation multiples for public companies, typically price-to-earnings ratios and price-to-book value multiples and apply the multiple to a private company's earnings or book value. It makes sense in that the multiples represent market values. Three issues, however, make this problematic. First, there are not many publicly traded engineering and construction firms, and it is difficult to find public companies comparable to the subject private company. They typically are larger and more geographically diverse as well as have deeper management teams and a very different mix of work. Second, public companies have different factors driving their valuation besides financial analysis. Recently, FMI had the pleasure to hear the view of a veteran construction industry securities analyst. We asked him about valuation, and the classic metrics. He said that while they were relevant, far more relevant were anticipated trends that drive the industry. Investors, the majority of them institutions, would look for trends such as the need for construction related to the electric grid, highways, water, or other waves of construction. They would then play the market by trying to buy into the trend early and sell before the wave subsided. Many of the investors were short term, not staying invested long enough to see if earnings materialized. There is nothing wrong with this, but using multiples based on these companies as a guide to an investor holding for the long term in a privately held company, is likely misleading.

Lastly, there is no ready market for the stock of a privately held firm. Buy/sell agreements may be in place, but financing any internal stock transaction is always subject to the financial condition of the company at sale time. Internal sales usually have to be done on a long-term note or share-of-earnings basis. In contrast, owners of stock in public companies can sell their shares quickly and for all cash. Unless the private firm is sold to a third party in an acquisition transaction, valuations for internal stock sales have to be financially feasible and not leave the firm without any means for continuing in business. An example of a problem situation would be a company with two shareholders where they decide to use a valuation of two times the book value of the company for one shareholder to buy out the other. In order to do this transaction, the buying owner would have to use all of the book value of the company for the value of the other shareholder's 50%. Using the company to effect the transaction would only work if the stock could be bought over time and financed, requiring the company to have strong continual and increasing earnings. This might be a gross assumption for an E&C firm with all the cyclicality of earnings in this industry. The valuation trap in this case is that paying for the high initial value may not work over time, eventually forcing a third-party sale.

USE OF INDUSTRY METRICS NOT RELATED TO RETURN ON INVESTMENT

This is a valuation trap into which engineers often fall. We (the authors) are both engineers by training, so we feel that we have the right to constructively criticize our brethren. Engineers and scientists spend the early part of their careers learning formulas that describe natural and engineering phenomena. Therefore, it might seem logical to relate the valuation of companies to various financial metrics. Revenue is a popular one. Data can be found that a group of acquisitions was done at a certain value. If we know the revenues of the acquired companies, we can relate the valuation to revenue. This would give us a ratio of valuation to revenue for the sample, and we have a valuation method. In the discussion above, however, we said the primary factor that a third-party buyer relies on is return on investment of an acquisition. If the valuation is strictly based on a price-to-revenue metric, the trap opens and closes without a look at the most important ROI measure. The more direct and relevant method would be to base valuation directly on profitability and underlying assets. We have had these arguments with engineers before with mixed results, but find that when engineers are actually going to make a cash acquisition, they too turn to return on investment or underlying asset values. For sales of small amounts of stock to employees and repurchases, the revenue-only-based valuation trap does not close. However, when a substantial amount of stock has to be bought, or the valuation has to match up to an actual third-party acquisition value, the trap can close.

USE OF FORMULAS THAT ARE UNREALISTIC TO SUSTAIN A PRIVATE COMPANY

To value stock in a privately held company for sale to employees or other internal transactions, a formal valuation done by a professional may not be practical or may be too expensive. Therefore, a formula is used, which may be written into a company's buy/sell agreement. The simplest formula is to use book value, and many companies do exactly that. Book value has the advantage of being easily measured and usually conservative. However, it does ignore the market value of assets and the earnings value of the firm. So often companies seek other formulas to better represent market value. This is particularly true for engineering firms who, like many professional service firms, often have minimal working capital and hard assets. Therefore, book value may be very low relative to an earnings-based valuation. Formulas can be developed on multiples of historical earnings, multiples of book value, of revenues as discussed previously, or combinations of all of these. A formula, however, can create problems over time. First, the business may change such that the formula no longer applies. The financial metrics can unusually increase or decrease such that the results of the formula may not be representative. Arguably, the most serious problem is when the formula results in a value such that the company or employees will strain to buy out exiting shareholders. As we often tell our clients, if the employees cannot pay for a seemingly justifiable valuation over a reasonable period, the buyout will not work, i.e. the parties fell into another valuation trap.

One simple method to help an owner understand the maximum value that he or she can practically realize from an internal/employee sale is to take the firm's current book value, add what the employees can initially invest and the estimated aftertax earnings over the years of the buyout, and subtract the book value needed to run the company at the end of the buyout period. Stated another way, the maximum value is what the company has now *plus* what it makes during the buyout *less* what you have to leave the employees to be independent of you. This maximum value is regardless of what other creative valuation techniques may tell you. Under this method, for example, if the buyout term is a 10-year period and ending net asset requirements are the same as in the beginning, the maximum price that can be paid will be the earnings over the 10-year-period. The point is that employees of E&C businesses and the companies themselves typically can obtain very little, if any, outside financing for an internal buyout. If they do obtain financing, it will need to be paid off directly from company cash-flow or indirectly through payments in compensation or distribution to the employees. Therefore, the principal way such a transaction can occur is financed out of the earnings of the business over time.

Statistically, not many companies survive to the third generation of ownership.

CONCLUSION

Statistically, not many companies survive to the third generation of ownership. Many do not make it because the market changes and the company does not adapt. Sometimes, a third party makes an offer that cannot be refused. More likely, for most private firms, is the inability to develop or attract successor management. However, many do not survive because of poor transition planning and unrealistic value expectations. Avoiding the various valuation traps discussed above gives the private company the opportunity to survive and prosper. An investment banker specializing in our industry recently said that most in this industry should be private because the flexibility and incentives are more appropriate. Our experience also is that exit options are limited in the construction industry. For a business owner in this industry, therefore, we strongly recommend that he or she be realistic about the company's worth and its long-term survival and avoid falling into the valuation trap. ■

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