

FMI



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Engineering, Construction and Risk: *Improving Your Odds of Success*



RISK

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Engineering, Construction and Risk: Improving Your Odds of Success

 fmiquarterly.com/index.php/2016/06/14/engineering-construction-and-risk-improving-your-odds-of-success/

Engineering and construction firms are dynamic and inherently risky businesses. Historically, owners, chief financial officers or risk managers were the sole administrators of risk management. Today, however, the issue of risk is everyone's responsibility, and a risk management culture must be engrained across the entire organization.

Memorable Quotes From The Video:

The issue of risk is everyone's responsibility – from project foremen to estimators to business development. Today we're dealing with issues of risk outside of project selection & execution that can derail even the best of contractors.

A decade ago, the issues of risk revolved mainly around project selection, project execution, change orders and safety. As risks in our industry are changing and expanding at a record pace, we face a very different playing field, characterized by tighter margins, increasing project complexity, acute labor shortages, retirement of experienced baby boomers and new cyber threats. Never before has there been less room for error. These new risks can derail even best-in-class engineering and construction firms—despite best-intended project execution.

This Quarterly edition presents a variety of approaches and strategies for addressing specific risks like selling a company or subcontractor default as well as more widely applicable approaches for assessing project risk profiles, to name a few. We also updated one of FMI's classic studies, "Why Contractors Fail," which presents root causes of contractor failure that still apply in today's industry context. All of the identified causes can be controlled and mitigated.

Our goal with this Quarterly issue is to inform choices and provoke ideas around effective strategies for managing risk in today's engineering and construction industry. Managing risk today is much more than using defensive tactics to protect against downside events—smart firms view risk as a strategic opportunity to win. So should you.

Chris Daum

CEO, FMI Corporation



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Why Large Contractors Fail – A Fresh Perspective

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During the past few decades, there have been dozens of large contractors that, after many years of growth and apparent prosperity, experienced notable financial disasters, resulting in bankruptcy or a reincarnation of the business in a much different form. Most recently, firms like the Truland Group Inc. have proven that construction firms are not too big to fail, even though they have operated successfully for generations with annual revenues ranging from hundreds of millions to several billions of dollars.

Memorable Quotes From The Video:

[“All firms can learn from examining the reasons why the large, sophisticated companies failed.”](#) [“One of the root causes of why contractors fail is the ego of the contractor.”](#)

In one of FMI’s classic studies—“Why Contractors Fail”¹—we investigated root causes responsible for bringing down industry giants over time. Almost a decade later, we conclude that despite the changing business environment in today’s engineering and construction industry, many of our findings still hold true, particularly in a growing market where contractors are significantly more likely to go bankrupt compared to during a downturn.

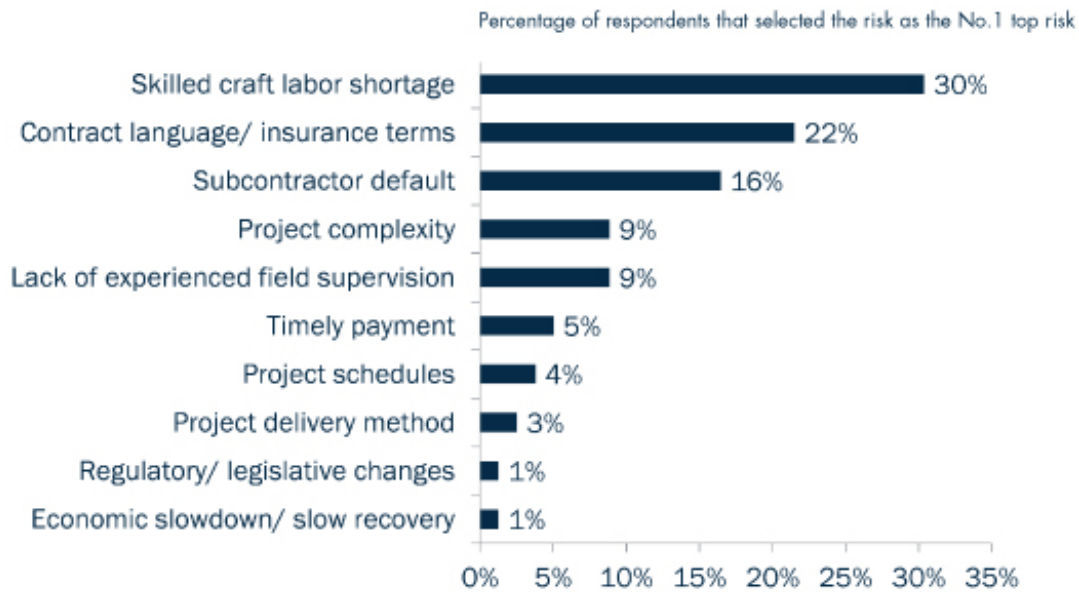
As we like to say, “Contractors don’t starve to death; they die from gluttony. They get too much work, too fast, with inadequate resources, and then they get into financial trouble and run out of cash.”

In this article, we look at today’s changing risk environment and revisit the five fundamental factors that conspire to cause contractor failure. These five factors are timeless and can help contractors avoid some critical mistakes while they continue to survive and thrive in good economic times.

Today’s Risk Environment: A Changing Landscape

Hit hard by the Great Recession, the construction industry has struggled to bounce back to pre-recession levels. Still, there are a number of positive trends taking place. For example, the industry didn’t witness nearly as many surety losses or large contractor failures as expected during the downturn—a sign that surety companies and banks have learned their lessons and are not letting companies overextend themselves any longer. It is also a reflection that the industry is becoming increasingly sophisticated: leaders are better educated and more apt to run their organizations effectively.

Working with hundreds of engineering and construction firms, we have also witnessed heightened risk awareness among business leaders. This was confirmed in a recent study where AGC and FMI surveyed the general and specialty contractors in AGC’s Surety Bonding and Risk Management Forum: 86% of respondents stated that today’s risk environment is different compared to five years ago, with skilled craft labor shortages being one of the biggest risks they currently face (Exhibit 1).² In response to the heightened risk environment, the majority (90%) of the survey respondents are managing risk differently and applying new tools and programs to assess risk more rigorously compared to five years ago.



Source: AGC/FMI 2016 Risk Management Survey

However, initial findings also indicate that the majority of contractors struggle to manage risk effectively. This is particularly alarming as we face another perfect storm in our industry. Consider the fact that between 2009 and 2015, the average number of months of contractor backlogs (for all types of contractors) has increased 33%.³ At the same time, contractor margins are tighter, contractual conditions and projects are more complex, and 1.5 million fewer construction workers remain in the industry (compared to pre-recession levels) unable to keep up with increasing demand.

Compounding these dynamics, baby boomers are reaching retirement age at a rate of 10,000 per day, and a younger and more inexperienced (millennial) workforce is moving into the industry. Moreover, contractors are winning more work in today's recovering environment, which in turn is placing increased stress on their working capital. In other words, they're trying to do more with less. That kind of pressure on working capital—coupled with craft labor shortages, fluctuating market dynamics and a dramatic loss of industry knowledge and leadership—creates a recipe for a potential disaster. It is within this environment that contractors face a higher risk of financial reversals.

Now more than ever, company leaders need to focus on five key organizational areas in order to navigate the unsettled external factors shaping today's industry. Following is a summary of these five factors that we identified in 2007 and that are just as applicable and significant today.

What Causes Large and Historically Successful Contractors to Self-Destruct?

In our investigation of why large contractors fail, we isolated about 200 potential factors that can lead to contractor failure. Upon examination of these factors, we determined that no single factor would usually signal the impending doom of a construction firm. We found that failing companies usually exhibited a combination of interacting factors that caused company performance to spiral toward inevitable financial failure.

During our analysis, we identified five root causes for contractor failure. Poor strategic leadership is the common

thread among all these factors. External factors (e.g., economic conditions, risk environment, etc.) are not primary causes but can accelerate the chain reaction of company failure. In essence, when contractors fail, “They do it to themselves—it doesn’t happen to them.”

FMI’s five root causes of contractor failure identified in the original study continue to be responsible for contractor failures today. Yet all of the causes can be controlled and mitigated.

The Five Root Causes of Contractor Failure

Factor #1: Poor Strategic Leadership

This is by far the biggest reason for failure in today’s business environment, where strong leadership can serve as a cornerstone for success in even the most difficult market conditions. For example, many companies get into financial difficulty when ownership changes hands from one generation to the next. To ensure successful ownership transfer and management succession, owners need to prove that the company can grow and succeed without them. The only way to do this is by having the right successors in place who are capable and willing to lead. At that point, the question becomes, can the next generation carry the business forward. This is frequently where firms get into trouble—regardless of whether they are family-owned or not. Companies that do not define a clear vision, purpose and a fact-based strategy often find themselves reactionary without setting true direction. Under poor strategic leadership, people begin making bad decisions (i.e., poor project selection, hiring the wrong employees, putting the wrong systems in place and so forth), and before the company’s leadership is aware, the firm can find itself on the path to failure.

FMI’s recent millennial research⁴ also underscores the importance of strong strategic leadership in the context of attracting and retaining a young workforce. Our findings showed that millennials are 25% more likely to stay long term when the company’s vision and direction are clear and inspire enthusiasm for work. For employees, this noticeable difference underscores the importance of understanding the key elements of an organization’s vision and strategy as well as recognizing what leadership expects from them, which is especially important for younger people who are just beginning their careers.

Factor #2: Excessive Ego

Another root cause of poor decision-making is the leader who exhibits an excessive ego. Extremely confident and often unwilling to listen to the opinions and suggestions of others, this person can literally take down the entire company. In our original study, we referred to this personality as the “Mind of the Contractor” (see our 2016 Quarterly article “The Icarus Leader: How High Will You Fly” for a more in-depth view on this topic). In order to be a successful contractor, you must have self-confidence and a high tolerance for risk. Contractors also must possess a high degree of optimism, or they would have a difficult time winning any bids and securing work. The key is to avoid carrying that optimism and risk tolerance to the extreme—a scenario that can lead to bad business decisions and ultimately company failure. There are many examples of construction firms that have run into financial problems due to the leader’s hubris and perception of being invincible. Sometimes this is referred to as “driving the business off a cliff at 100 mph”—self-destruction at its worst.

Factor #3: Too Much Change

The research and one-on-one interviews we conducted indicated that in 90% of the company-failure cases, “too much change”-related issues were a crucial element in the actions that led up to the disaster (Exhibit 2). When too many things happen too quickly, it’s easy to get overwhelmed and thrown off course. Any company can absorb some level of change, but there’s a limit to what most organizations can handle at any given time. To avoid driving too much change in the organization and managing it more effectively, we suggest companies make a list of everything that’s new, including customers, projects, geographical targets, superintendents, project managers, systems, etc., to fully understand the speed of change the organization is currently going through. The more changes they can name, the higher the risk of failure. Therefore, it is critical to manage the rate of change on an ongoing basis.

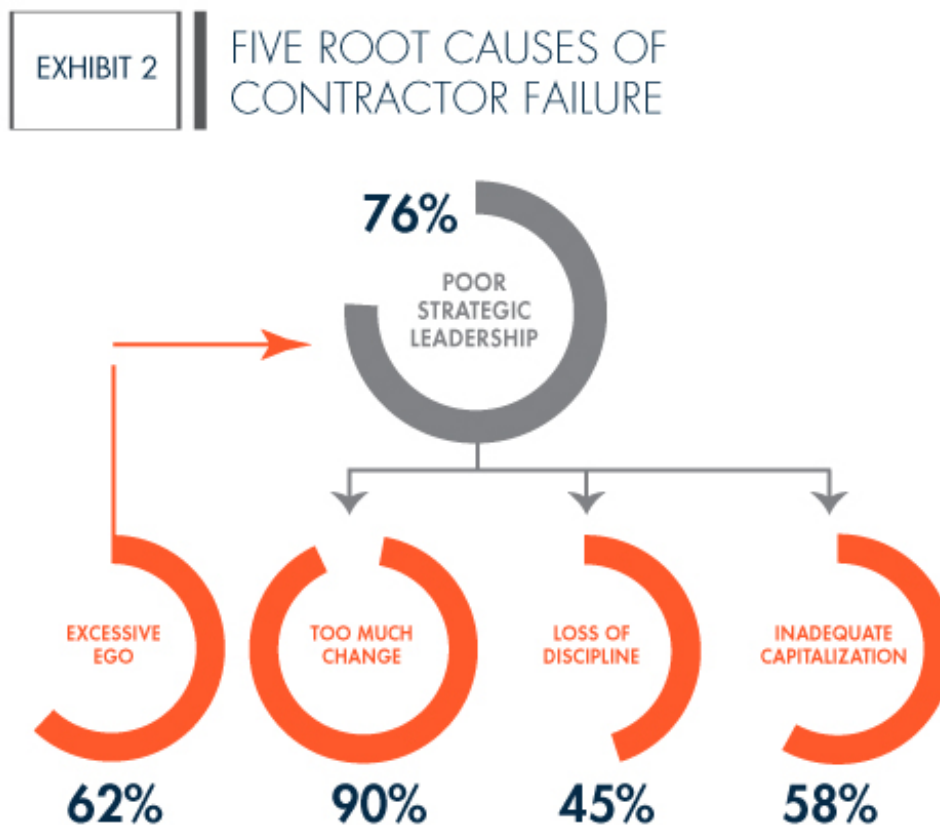
Factor #4: Loss of Discipline

Successful construction firms tend to be extremely well-disciplined in all areas of their business. Most companies that experienced failure grew from small, regional operations into national powerhouses (e.g., J.A. Jones, Guy F. Atkinson, etc.). Along the way, these firms almost universally lost their internal business discipline, became overall bureaucratic and started doing things outside of their core competencies. On the other hand, there are a few world-class contractors in the U.S. that operate with an incredible amount of discipline. They do the same thing the same way—every day and everywhere that they operate. This discipline is built into the company’s culture, transpires throughout the organization and can last for generations.

Factor #5: Inadequate Capitalization

Cash is King, and inadequate capitalization will bring a company to its knees in short order. In the construction industry, a single job (depending on its size and scope) can have a profound impact on a firm’s success or failure. The difference between a good year and a great year or a bad year and a catastrophic year can be one or two jobs.

Sometimes people will ask us, “How much money should I keep in my construction company?” And we always answer this question by asking, “How much money can you lose on a single construction job?” And when you think about this, the answer is, “All you’ve got.” Construction projects have upside limits on the level of profit that you can earn, but the amount of money you can lose is unlimited. Overcoming this failure factor requires an adequate capital base that allows you to withstand inevitable problems and live to fight another day.



Source: FMI industry analysis. Percentages indicate company-failure cases in which specific root causes played a crucial role in financial reverses. For example, in 62% of the company-failure cases, ego-related issues were a crucial element in the actions that led up to the disaster.

Controlling Your Own Destiny

Construction is a dynamic and inherently risky business. Our research indicates that the causes of contractor failure are similarly dynamic and involve a number of difficult-to-manage risk factors. While many point to external factors

as the primary culprits for failure, we see many examples of companies that succeeded despite the same difficult external forces being present while others failed. In our study, many seasoned industry executives emphatically rejected the notion that luck or other extraneous forces were responsible for their companies' decline.

Nonetheless, we do see a need to identify the role that external economic conditions can play in hastening the demise of firms that are already on the road to failure. Our study indicates that these external factors are not root causes, but that they are actually accelerants that quicken the pace of demise for companies already suffering from one or more of the root causes noted. Successful contractors live on a thin edge. However, the good news is that all the root causes identified are controllable—regardless of the external environment—which means leaders can shape their own destiny and not be victims of fate. As the industry continues to shake off the effects of the Great Recession and adapt to new labor market trends and competitive pressures, the companies that take these factors to heart and strive to overcome them will survive and come out the winners.

To assist companies with this charge, FMI is continuing its research and publication on topics aimed at helping companies more effectively control their fates. Future Quarterly issues will investigate causes of contractor failure associated with different business areas and provide effective strategies for managing those risks in the future.

[1] “Why Contractors Fail: A Causal Analysis of Large Contractor Bankruptcies.” Hugh Rice and Art Heimbach. FMI Quarterly Special Issue. 2007.

[2] Key findings of this study “Managing and Mitigating Risk in Today’s Construction Environment” will be published by AGC and FMI in July 2016.

[3] See our Quarterly article “Managing and Mitigating Subcontractor Default Risks” by Mike Bond, Zurich. June 2016.

[4] Millennials in Construction: Learning to Engage a New Workforce. 2015 FMI Industry Survey.



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The Risk of Wage Rises in Construction: Three Key Trends

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Operating a tightening labor market, engineering and construction firms need to pay close attention to salary, benefits and other labor-related trends that can help them avoid job delays, botched projects and profit losses.

Why do contractors keep guessing about pay? In this “war for talent” in key construction roles, contractors continue to underpay and overpay, based on anecdotal information or small sample bias. In FMI Compensation’s Incentive Compensation Effectiveness Study,¹ most contractors receive their pay information from peers. Only a quarter of contractors use labor market intelligence. There are multiple sources of labor market pay rates for the construction industry, but there is probably a lack of awareness of its availability. In this new era of big data and intense labor competition, contractors could benefit from changing their pay practices. Instead of basing pay decisions on what candidates demand, what the recruiter says, or divinely inspired hunches—do your research and look it up!

Pay is moving in unexpected ways in critical skill areas and geographies while moderating in other “cooling” skill areas. Understanding market pay trends allows leaders to plan more accurately for the future and adapt to important developments that are fundamentally reshaping the industry.

In this article, we explore three key trends currently shaping the compensation aspect of the construction market and provide recommendations that firms can use to navigate the market fluctuations and come out ahead.

Labor: A Not So Ancient History

From December 2007 to June 2009, the Great Recession resulted in more than 8.2 million job losses across the nation. Construction put in place fell from a seasonally adjusted annual rate of \$1.2 trillion in March 2006 to a low of \$754 billion in February 2011. By the end, approximately 2.3 million construction jobs were lost—nearly 30% of the construction workforce.

Six years later, the construction industry is back on track, albeit characterized by some ebb and flow. In April of this year, a decline (biggest in five years) left total construction spending at a seasonally adjusted annual rate of \$1.13 trillion, up 4.5 percent from a year ago.²

Total construction employment has rebounded to just over 6.5 million³ workers, still a far cry from its peak of 8 million workers in 2006. Despite being almost 20% below its 2006 peak, the industry is struggling to find qualified labor. Could 1.5 million workers have left the workforce for good?

The answer is an unequivocal yes. Some workers found new careers, while others left the workforce entirely. In fact, according to research published by the Census Bureau, the authors suggest “60% of displaced construction workers have left the labor market or moved into other industries.” The authors also note that, “Although some former construction workers transitioned quickly to other sectors, for most, a move into another industry occurred after a long spell of non-employment.”⁴

With baby boomers retiring and a lower number of college and high school graduates entering the construction field, we’re seeing a widening gap between construction labor supply and demand for such labor. Consequently, wages are increasing steadily—in some cases dramatically.

Ken Simonson, AGC’s chief economist confirmed, “Although construction employment slipped in April and May, the industry has added workers in the past year at double the rate of the overall economy. Average pay in construction is rising faster than in the rest of the private sector, and the number of unemployed construction workers was at the

lowest May level in 16 years. These facts support what contractors tell us: they have plenty of work but are struggling to find qualified workers to hire.”⁵

Business is brisk and markets are tightening. As these trends continue, the decline in the construction labor force is having an impact in areas where skilled worker shortages are now prevalent. U.S. skilled-worker wages are expected to average 4%-plus growth through 2017,⁶ with wage growth in skilled occupations fluctuating based on geography and skill set.

Following are three specific construction wage trends (based on FMI compensation’s industry surveys for construction professionals) that companies should be paying attention to in 2016.

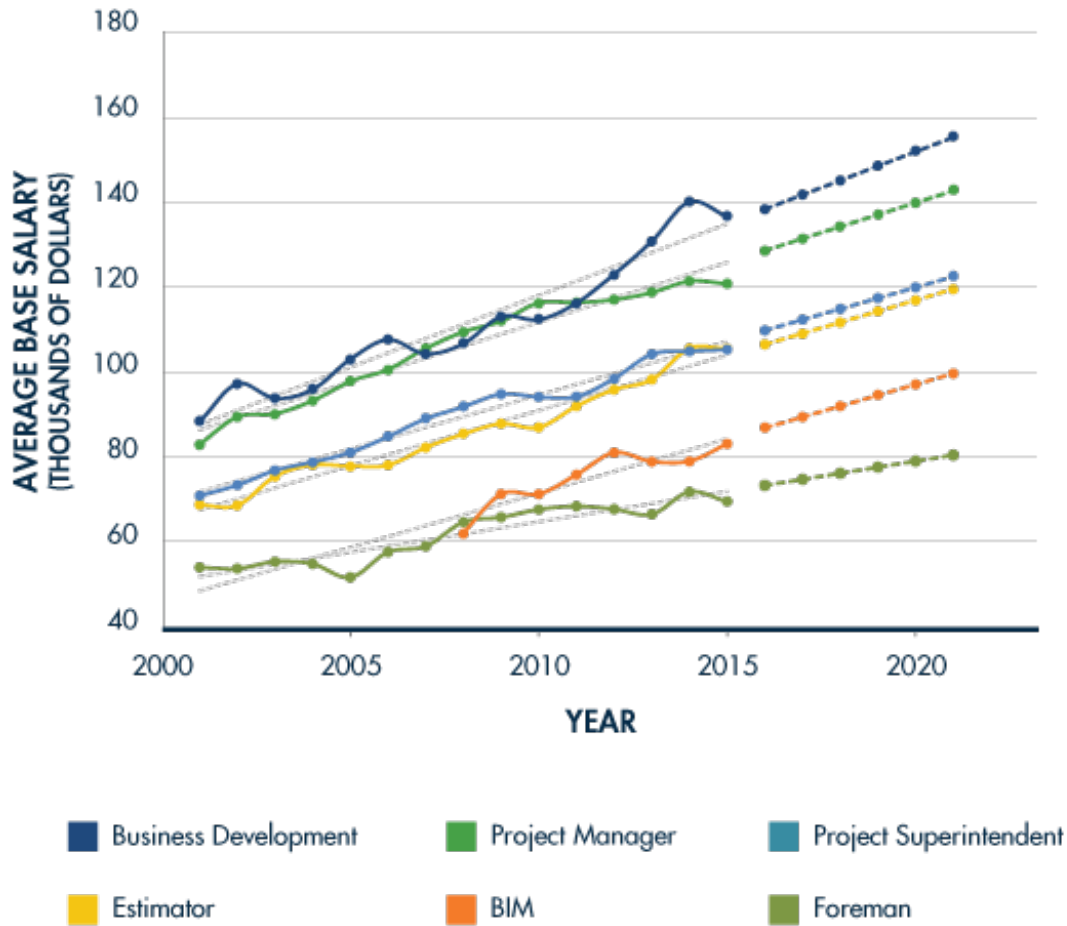
Three Key Construction Wage Trends and Projections

Trend #1: Rising Construction Professional Pay Rates

For the past 15 years, FMI’s Compensation Group has been tracking six key benchmark job families, including business development, project management, project superintendent, estimator, general foreman and Building Information Modeling (BIM) professional. Exhibit 1 shows the base pay trend for each job and reveals that, in general, pay levels have been increasing since 2001. Although employment levels may have receded during the recession, those jobs requiring specialized skills and knowledge have experienced steady pay increases.

EXHIBIT 1

CONSTRUCTION PROFESSIONAL PAY TRENDS AND PROJECTIONS



Source: FMI Compensation Survey Data

Looking ahead, annual base pay averages for business development and project management, for example, are forecast to exceed \$140,000 by 2020. During that same time, base pay averages for project superintendents will exceed \$120,000, and pay for general foremen will exceed \$80,000. For BIM professionals, average base pay is on track to hit \$100,000 by 2020.

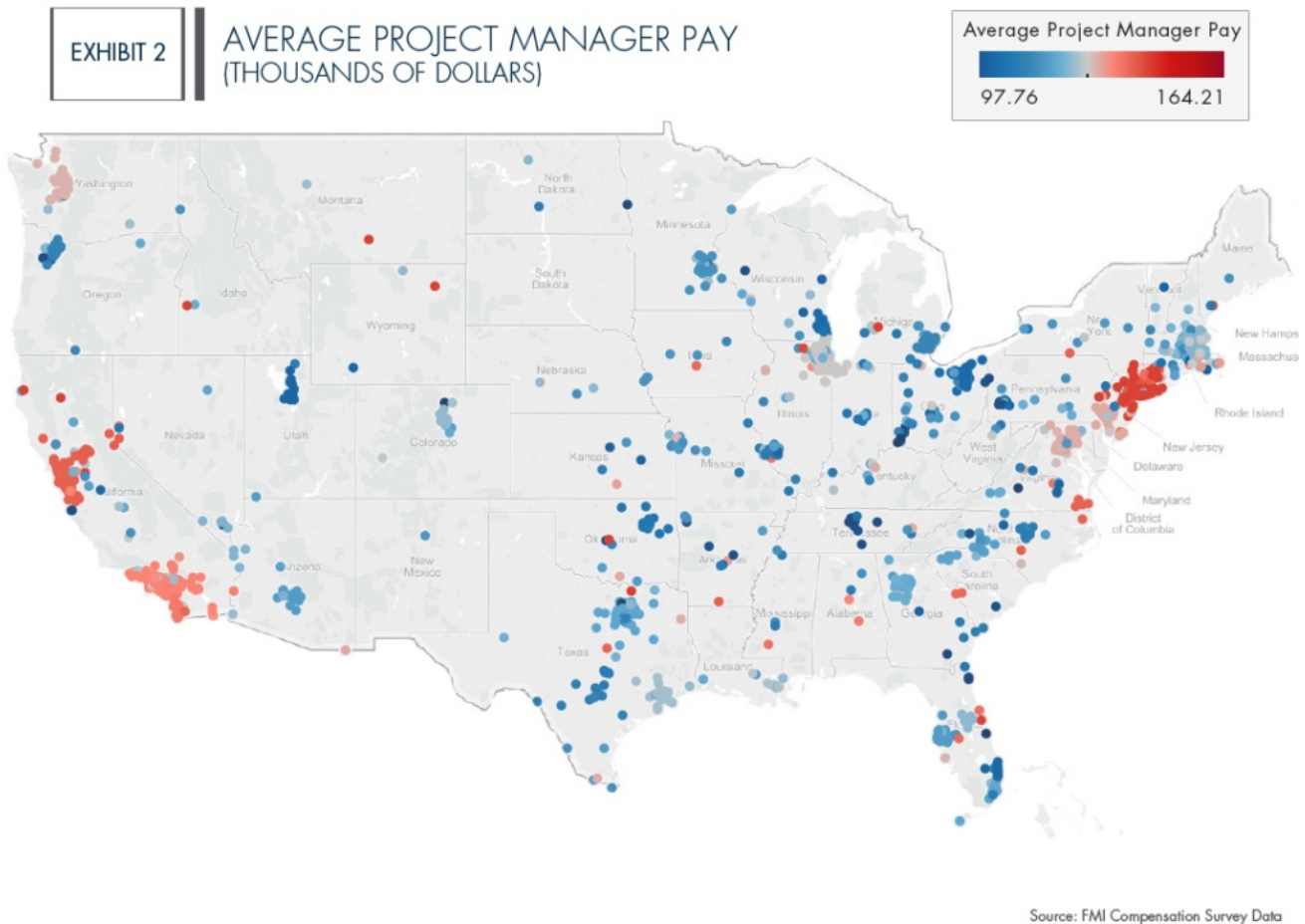
Some wages are rising more rapidly than others, including those for business development, for example. This trend indicates that the industry is emphasizing revenue generation in an increasingly competitive environment. This goes beyond nurturing client relationships and extends to researching and gaining a better understanding of owner needs and proactively providing solutions. A more complex sales process requires more highly skilled professionals who, in turn, demand higher compensation. The industry may see the emergence of more traditional sales forces (larger with more specialized roles) not unlike building product manufacturers or mechanical contractors.

As the industry expands and as organizations ramp up their hiring strategies, they must incorporate these increasing labor costs into their human capital strategies and project estimates.

Trend #2: Disparities in Geographic Pockets

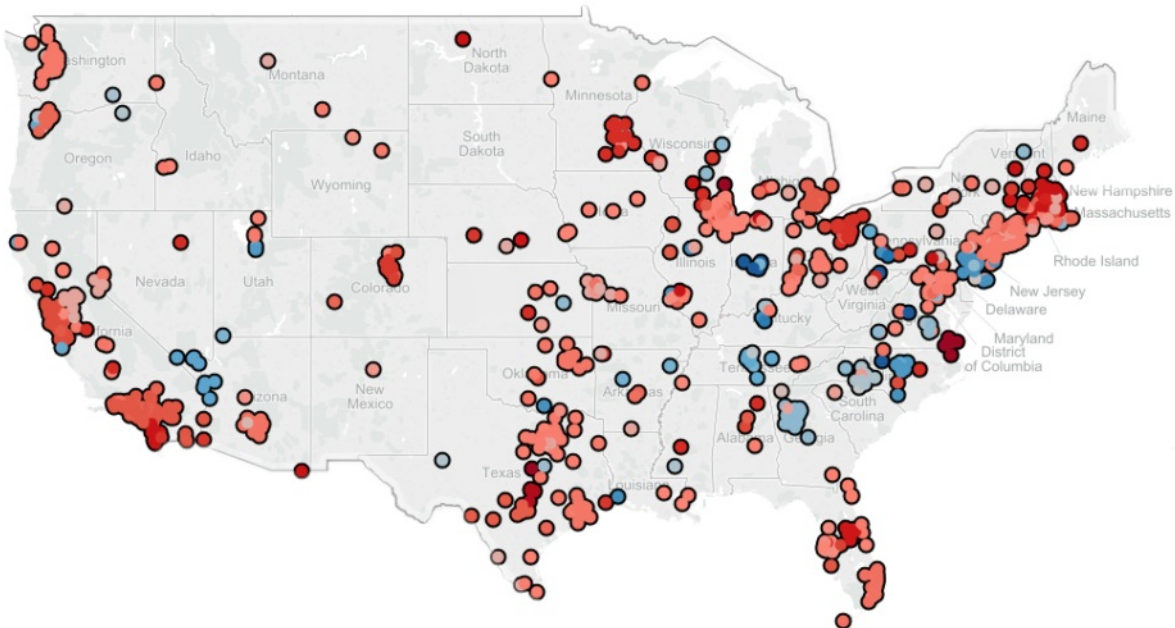
Different geographies experience significant differences in pay. Exhibit 2 shows the variation in average pay for

project managers. Higher pay is indicated in red and lower pay in blue. The hotter areas include the western coastal cities as well as the New York City metropolitan area. However, hot areas (areas of higher pay) are interspersed throughout the country. Indeed, hot areas can be adjacent to cooler cities, which suggests that local labor market data is critical to understanding competitive pay levels.



For construction firms, failure to recognize the local labor market conditions can result in either overpaying or losing top talent. For example, average project manager pay in red-hot San Francisco is \$142,000, while average pay in nearby Monterey is \$101,000. Now, it's true that Monterey is a lovely place to live and the cost of living in San Francisco is high, but with all those red-hot pay areas located just a little north, it's certainly worth considering the move.

Exhibit 3 illustrates the rate of pay increase across the country for project managers. Hot areas (those with maximum pay increase) are indicated in red. Not surprisingly, project manager wages are increasing in high-growth, urban areas. In addition, at some point, the pay differential becomes irresistible. Hence, firms must understand the local market conditions but also the nearby local, state and regional conditions in order to retain key talent.



Source: FMI Compensation Survey Data

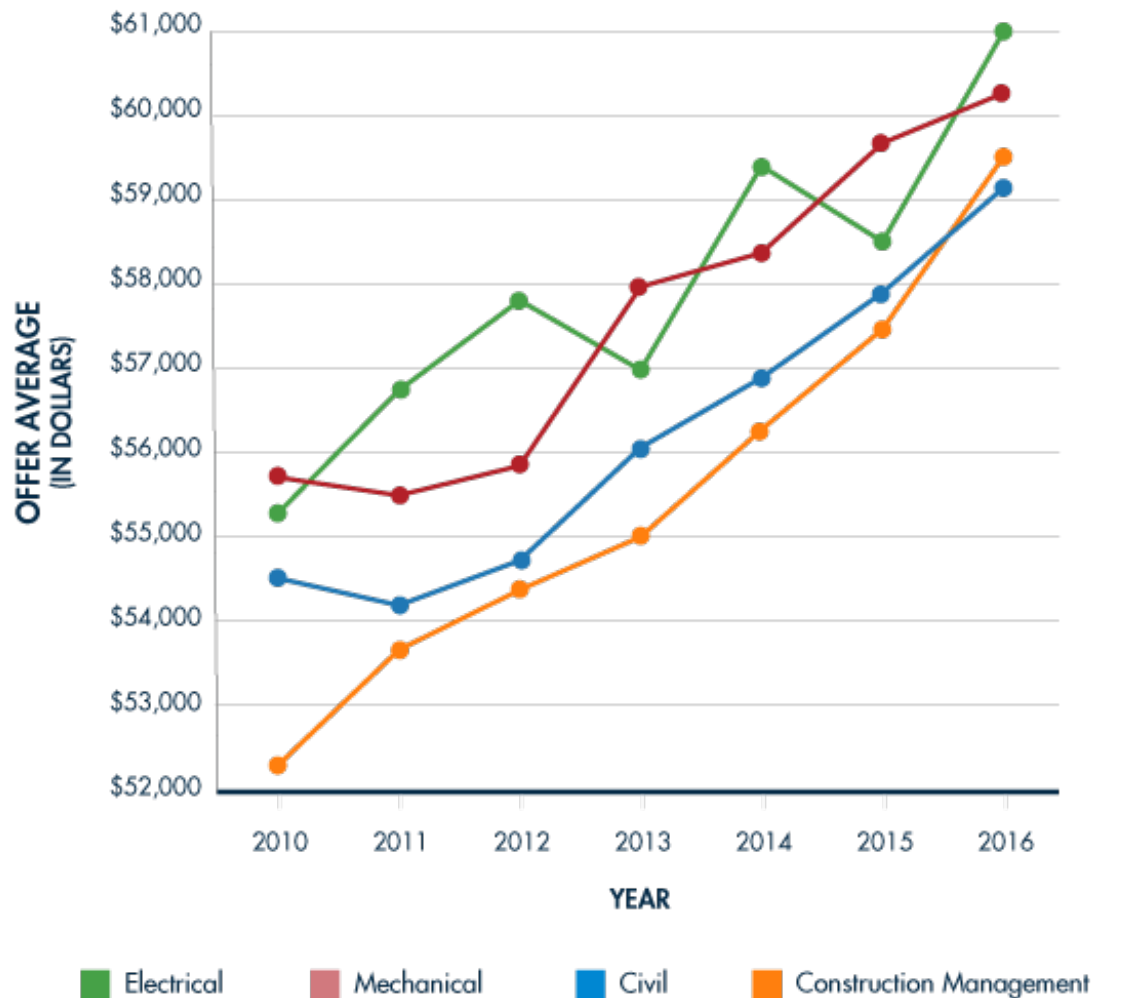
For business planning purposes, organizations must recognize the overarching trends, or risk falling behind in key competitive areas. In addition, they must understand not only the local market conditions but also the labor market dynamics. Otherwise, organizations risk underestimating their long-term costs and losing good employees to their competitors, which ultimately can lead to botched jobs and decreased profits.

Trend #3: The Cost for New College Graduates Is High

Construction firms must also pay attention to their employee pipelines, particularly their young employees, who will comprise their future workforces. Not only do college graduates command higher pay (see Exhibit 4), for example, but also the pay for construction management has outpaced other engineering degrees as a result of the demand in the construction industry (and the downturn currently being felt in the oil and gas industries).

Without a clear understanding of competitive pay levels for graduates, construction firms may fail to fill their talent pipelines sufficiently, risk talent shortages, overpay/underpay their workers and risk hurting their bottom lines. Firms should bear in mind that the leaders of tomorrow are the new hires of today and that filling the seats of the next generation of leadership requires hiring today's talented college graduates.

NEW COLLEGE GRADUATE (BACHELOR'S) AVERAGE ENTRY SALARY: TRENDS AND PROJECTIONS



Source: FMI Compensation Survey Data

Do Your Research and Develop a Long-Term Compensation Strategy

Much like companies compete with one another to sell their products and services, they also go head-to-head for the best and most talented employees. For this and other reasons, a competitive pay strategy serves as the very cornerstone of any good human capital investment approach.

Deep knowledge of labor market data and industry trends is a fundamental building block of an effective pay policy. Such information is available through industry benchmark surveys, for example, and can be used as a foundation for developing customized compensation programs over time.

Deep insights into labor market dynamics can also help contractors increase company performance through well-defined (and competitive!) incentives that motivate their employees to go beyond the call of duty. A well-defined incentive compensation system helps companies develop employees who excel at maximum levels and beyond. It also helps companies more effectively manage the risk of losing good, experienced (or aspiring) staff members.

Finally, as the construction industry continues to recover, markets are becoming increasingly competitive and

organizations are facing a litany of new risks. Among the latter are those associated with compensation—namely, either overpaying or underpaying employees. In this fast-changing environment, understanding the pay trends associated with key job families (i.e., business development and project management)—both short- and long-term—can mean the difference between a profitable future and one that’s fraught with challenges and unforeseen risk. As we move forward, contractors in the labor management business must pay attention to their total rewards to attract and retain the best talent and realize their desired returns.



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[1] FMI Incentive Compensation Effectiveness Study. The 2013 U.S. Construction Industry Incentive Compensation Survey. 2013.

[2] “US Construction Spending Tumbled in April.” Martin Crutsinger. Associated Press. June 1, 2016.

[3] Bureau of Labor Statistics. Employment statistics for May 2016.

[4] “Here’s Where All the Construction Workers Went.” Jeffrey Sparshott. WSJ Blog. Oct 19, 2015.

[5] “Construction Headcount Dips in May but Outpaces Overall Rate of Job Gain since May 2015; Rising Pay, Plunging Unemployment Suggest Worker Scarcity.” Ken Simonson. June 3, 2016.

[6] “Tightening Labor Market and Rising Construction Wages for 2016.” Guest post from IHS. Spend Matters. February 18, 2016.

Five Pitfalls to Avoid When Selling Your Company

fmiquarterly.com/index.php/2016/06/12/five-pitfalls-to-avoid-when-selling-your-company/

How to successfully transition ownership while managing risk in the process

As the famous generation of baby boomers reaches retirement age, much has been made about the tremendous wealth transfer of the largest and wealthiest generation the country has ever seen, with estimates ranging from \$20 trillion to \$41 trillion set to change hands in the next 50 years. Focusing on the construction industry alone and projecting estimates from FMI's Ownership Transfer and Management Succession (OTMS) survey of industry firms, a little more than 50% of companies will change ownership in the next 10 to 12 years. The question is when and how.

Memorable Quotes From The Video:

"Owners must give themselves enough time to make the best decision for the company." "Owners cannot lose sight on how best to manage the company during the selling process."

EXHIBIT 1

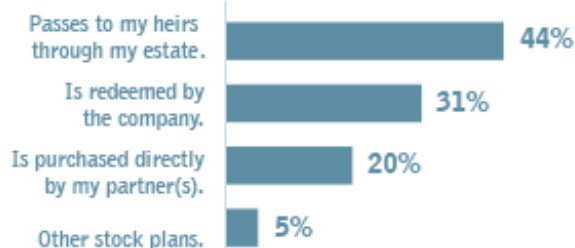
STATISTICS FROM FMI'S OWNERSHIP TRANSFER AND MANAGEMENT SUCCESSION SURVEY

64%
of OWNERS

HAVE A FORMAL PLAN IN PLACE TO ENSURE CONTINUITY OF OPERATIONS IN THE EVENT OF THEIR DEATH

36% DON'T

IN THE EVENT OF MY DEATH, MY STOCK ...



44% OF OWNERS
HAVE A FORMAL PLAN IN PLACE TO TRANSITION THEMSELVES OUT OF
MANAGING
THE BUSINESS, WHILE
56% DON'T

Source: FMI's 2013 OTMS Survey

Never an easy decision to make, passing the ownership baton can be particularly challenging for privately held businesses. The transition can take on various forms, from an outright sale of the business to a partial sale, a well-

aligned strategic acquirer or an internal transfer to current employees.

Whatever the exit strategy, laying the groundwork for a successful sale is one of the most significant challenges a business owner will face. The wrong approach can create major financial consequences for the current owners, the future owners and the company itself. It pays to know your options and which of them is (or isn't) the right fit for your business. Unfortunately, many owners lack the expertise and guidance to identify the proper path to exit and effectively manage key challenges along the way. These risks are best addressed through long-term planning and near-term positioning, through which business owners balance the company health with their desire to maximize value upon exit.

In this article, we present five pitfalls that owners encounter when selling their companies to internal or external buyers and outline practical recommendations on how to prepare for and overcome these challenges.

1. There Isn't Enough Time

Risk: *You waited too long to properly evaluate and decide on the optimal exit strategy, and now you don't have enough time to execute your preferred plan.*

Assuming an owner does not want to simply wind the company down, he or she must decide whether to sell internally or externally and then plan accordingly. For many smaller, privately held architecture, engineering and construction (AEC) firms, an internal sale to employees is a preferred option. AEC firms are highly people-driven and are often well-suited for internal ownership transfers. In particular, engineering and architecture firms often build relatively large ownership bases—utilizing equity as an incentive and retention tool—that facilitate an internal sale. Also, some firms in this industry are not highly marketable in an external sale process and find that an internal sale can yield higher value.

Internal and external methods of selling a business present significantly different time horizons. A sale to a third party can be measured in months, while an internal transfer can take five to 10 years or longer, depending on company performance and valuation. For an internal sale to work, the seller must have sufficient time left in the business to stay involved during the transition. The buying shareholders must also fit the profile (i.e., be the right age with the right leadership qualities). If a seller waits too long to decide on an exit strategy, he or she may find that timing and circumstances can limit available options.

To mitigate this risk:

- Evaluate your selling options as early as possible, even years before you're actually considering a sale.
- Thoroughly understand the process and timing for each exit option at your disposal.
- Collaborate with experts to understand the viability of each exit option – Is there a market for your firm? Are you structurally equipped for an internal transition?
- For each option, weigh the valuation tradeoffs, the timing implications and the impact each can have on your company and employees.

2. You Don't Fully Understand the Internal and External Factors Impacting a Sale

Risk: *If you proceed without proper diligence, you limit your chances to execute a successful sale process and maximize your company's valuation.*

It's hard to time a sale *perfectly*. But you can manage timing risk (and seller expectations) if you understand valuation as well as the market dynamics and trends impacting your firm. Key areas to consider include the

prevailing market conditions (Where is the company's market in the current cycle? Is this market expected to continue to grow for the foreseeable future or do prognosticators expect an ebb in growth or a reversion to a norm?). In turn, you should honestly assess how you are positioned (Is your pace of growth consistent with the market, or is it better or worse? Are your market share and competitive position improving?).

A seller also needs to look inwardly to identify shortcomings in operations (Is the company sufficiently staffed? Does it lack resources? Is it managing capital properly?) and any weaknesses in performance (Is revenue growing? Are margins improving? Is backlog strong? Are there any problem projects?). Think like a buyer. No one wants to admit that his or her baby is ugly, but recognizing and addressing issues early can help you get out in front of potential problems that can impair valuation or even impact your ability to sell.

To mitigate this risk:

- View your company and the prevailing market conditions with a discerning eye.
- Make sure the company is sufficiently positioned to compete and grow in the current market cycle.
- Maintain the flexibility to time the process right so you get the desired market value without compromising your company's long-term health.
- Be proactive in identifying and fixing operational issues that will surface during the process.
- Use appropriate financial controls that support scalable, ongoing growth.

3. You Lose Sight of How Best to Manage Your Business During the Sale Process

Risk: *You change the way you do business because you are distracted by the sale process or because you want to retain as much cash as possible, even at the company's expense.*

Few issues can hurt a deal more than a drop in operating performance during a sale process. Regardless of the preferred exit path, an owner must work to strengthen the business and make sure that it's well-positioned for sale. Potential buyers want to see a track record of success and sustainable performance during and after the sale process. The company must continue to prioritize business development, project performance and operational and financial controls. If performance begins to fall short of the forecast or backlog begins to drop off while engaging with buyers, interest will wane and pricing can suffer.

Sometimes owners reduce or shut off investment in the company while selling a business, because they want to take as much excess cash out of the business as possible, or because they simply don't want to invest for the benefit of another owner. A seller should avoid risky strategies and certainly doesn't need to make unnecessary capital investments. However, you need to continue normal hiring, operating expense and capital expenditure practices. You do not want to damage the business with short-term savings that can have broader implications. A buyer may very well factor any lack of investment into the deal price anyway. Therefore, owners must keep their eye on the ball and continue to operate the business in a manner that protects the company long term—whether an ownership transfer ultimately takes place or not.

To mitigate this risk:

- Continue to manage the business as though a sale may not go through ("business as usual").
- Avoid cutting headcount or suspending hiring if the motivation is simply to boost earnings and deal pricing.
- Maintain consistent investment and management practices (e.g., continue investing in the right equipment, people, systems and product/service development efforts).
- Avoid unnecessarily aggressive or risky strategies during this critical period.

4. You Underestimated the Difficulty of the Deal

Risk: *What seemed straightforward at the outset has since become an extremely complex selling process.*

It's easy to underestimate the complexity of the deal process, from selecting the right buyer to navigating the steps along the way to close a deal. Maybe you didn't factor in how disruptive the process or a change in ownership can be for your employees, or perhaps you overlooked the tax implications of selling your business. Value is only one piece of the puzzle. An owner needs to weigh the cultural issues, the market implications and the impact that a deal structure can present personally. In fact, assessing the cultural fit can be just as vital (if not more) to a transaction in the AEC industry than price.

An owner is taking a significant leap once he or she he or she agrees to move to the next phase with one buyer on an exclusive basis. If you don't do your homework on a prospective buyer before entering into an LOI, and don't allow the buyer to do the same, you are letting too much execution risk into the process. At a certain point, you let your employees, your customers and the market know about the pending sale. Now, more than just the purchase price is at stake, and you need to be certain that you've chosen the right buyer and that you can get a deal done.

To mitigate this risk:

- Determine your sale objectives, develop a plan and assemble the right team of advisors to understand how a process works and the commitment involved. At the outset, make sure everyone is aligned on how to maximize transaction efficiency and results.
- Consider the cultural fit of a potential merger through the eyes of the buyer, the employees and the customers.
- Enlist accounting and legal experts early in the process to understand the tax and legal implications related to your corporate structure (LLC, S-Corp., C-Corp.) or type of sale (stock vs. asset; internal vs. external).
- Demand that a buyer detail all high-priority deal terms in a comprehensive LOI so you resolve the most important issues prior to moving forward with any one buyer. This way, you minimize the major points of negotiation during the remainder of the process and increase the certainty of closing.

5. There's No One to Follow in Your Footsteps

Risk: *If you are not putting the right people in position to assume leadership, then any exit plan can be compromised.*

If you want to make a clean exit, then you'll have to prove the company can grow and succeed without you. The only way to do this is by having the right successors in place who are capable and willing to lead. Is this individual or group of future leaders prepared? Does he or she have the years of requisite experience or training to take over where you left off? Do you have the people to backfill as managers move up?

With a third-party sale, an owner must determine his or her preferred timeline not only for selling stock, but also for pulling away from the company completely, and convey that intent to the market. Even so, a buyer may not let the seller walk away until they determine he or she is no longer needed. With an internal sale, half of the equation involves transferring ownership while the other half involves transferring leadership and doing so at the right pace with the right people. Succession is an intuitive, but often neglected, issue that an owner must address before a successful transition (internal or external) can take place.

To mitigate this risk:

- As soon as the thought of selling comes to mind, evaluate who can fill your shoes.

- Carefully consider whether this person (or these people) is truly ready to take over, or if additional training, mentoring and other enrichment is needed.
- Develop a plan for transitioning these roles and responsibilities to the right people in the right time frame.
- Make sure there is a deep bench behind those leaders and that the entire business isn't reliant on one person's ability to replace the owner/founder.

Conclusion

All sales require a high degree of work, sweat and due diligence to reach a successful conclusion. Regardless of whether you sell to your employees or a third party, there are some strategic moves you can make to either circumvent potential risks or effectively address them as they surface. By planning ahead with the right team, choosing successor(s) far in advance, prioritizing the company's financial health and paying attention to market dynamics, a selling owner will be well-positioned to complete a successful exit and progress to the next stage.



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Managing and Mitigating Subcontractor Default Risks

 fmiquarterly.com/index.php/2016/06/14/managing-and-mitigating-subcontractor-default-risks/

Surety bonding can serve as an effective tool to help protect general contractors from the challenges associated with subcontractor default.

I have some good news and some bad news. The good news is that construction spending is slowly rebounding to its pre-2008 levels. The bad news is that many contractors and subcontractors, weakened by the tough market conditions over the past six years, are struggling to cope with the challenges of an increased backlog. According to the Surety and Fidelity Association of America, in 2014 (the last year we have complete data) contract surety claims increased significantly from the prior year.

Some segments, mostly related to subcontractor performance, which showed strong loss activity included:

Segment	Loss Ratio *
Federal: Drywall and Glazing	740%
Federal: Siding and Glazing	1027%
State / Municipal: Painting and Sandblasting	109%
Private: Carpentry	89%

* Surety and Fidelity Association of America, President's Presentation, 2015
(www.surety.org/page/AnnualMeeting2015)

While 2015 showed some increased growth in the construction market, smaller contractors and subcontractors continue to face extremely challenging conditions.

Consider this: The third-largest U.S. homebuilder saw its net income drop by 30% in the third quarter of 2015 (compared to the same period in 2014), indicating a scarcity of tradespeople as the reason for a slowdown in its home completions.¹ Also, a leading Midwest curtain wall subcontractor went bankrupt in 2012 due to an inability to manage cash flow.² This left many general contractors scrambling to find a replacement provider and missing project deadlines.

These are just two examples among hundreds of general contractors and subcontractors that are having difficulty weathering one of the biggest challenges in construction today: successfully managing higher backlogs with fewer people to do the work.

Stress of More Construction, Less Labor

In the wake of the 2008 financial crisis, many tradespeople left construction for a different industry, decided to retire or even returned to their homelands (if they were immigrants). The industry began to recover in 2012, reaching double-digit growth in spending, with the U.S. posting a 13.7% year-over-year gain in August 2015.³ This increase in construction spending has resulted in a severe worker shortage, with 86% of contractors reportedly having trouble filling craft positions.⁴

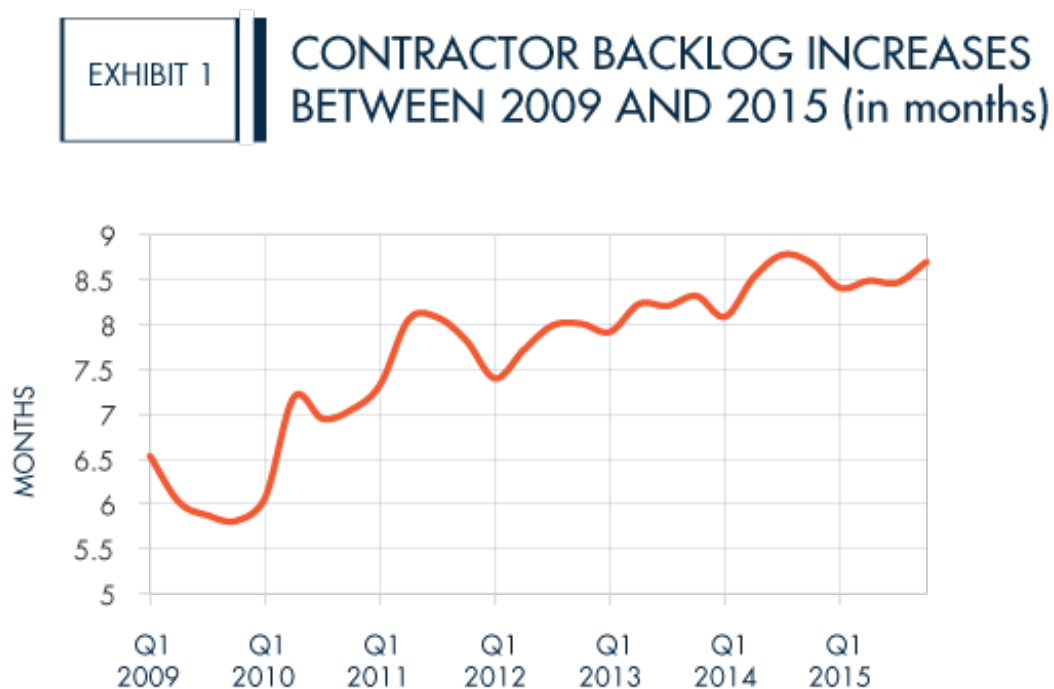
With quality workers harder to find, contractors are paying more to attract craftspeople to their projects. A 2015 wage

and benefits survey reports a significant 6.4% jump in average base wage in the U.S. since midyear 2014 compared to an annual increase of 3.9% in 2014.⁵ This is the biggest increase seen since 1986 and is putting additional strain on the cash flow of subcontractors.

The scarcity of skilled labor poses a triple threat for contractors and subcontractors. It leads to increased costs for the subcontractor, increased risk of not finding enough skilled workers to even finish a contract, and the increased risk that the quality of the work executed suffers. While some of these risks fall squarely on the subcontractor's shoulders, the general contractor (and even the owner) will ultimately have to deal with delays or the cost of rework arising from these risks.

Struggle to Manage Growing Backlogs

In spite of positive industry growth, many subcontractors can't manage the significant increase in backlog over the last six years. Since 2009, the average number of months of contractor backlogs (all types of contractors) has increased 33%—from 6.53 months in the first quarter of 2009 to 8.70 months in the fourth quarter of 2015 (Exhibit 1).⁶



Source: Associated Builders and Contractors, Construction Backlog Indicator, Q4 2015.

The 2008 economic downturn stressed many subcontractors' balance sheets. In its aftermath, we saw a willingness to accept thinner margins when bidding, plus higher costs when executing the work. Combined, these factors have reduced subcontractors' working capital. The financial cushion they built up in the heady, pre-2008 market may have dried up by now. As backlogs increase, capital resources are strained and many subcontractors find it difficult to execute on their existing workloads.

What's striking about this trend is that many subcontractors have not adjusted their business models to the new margins and are carrying too much overhead to maintain their operations. Juggling tighter cash flows and labor pools in this "new normal" is pushing even large subcontractors out of business. This, in turn, creates heightened risk for general contractors and their clients.

It is counterintuitive, and somewhat ironic, that subcontractors who managed to survive when the market was at its

absolute lowest are now failing, in the midst of the recovery. But those of us who have lived through a few different construction cycles know subcontractors should be watched more closely during upticks.

For subcontractors who may be dealing with cash flow issues, slow payments might further weaken their ability to fund a growing backlog. Because subcontractors are at “the end of the payment line,” slow payment by the owner is compounded by slow payment by the general contractor. That means subcontractors have to wait months, if not years, for final closeout payments. This waiting game has led to a number of subcontractors calling their surety with the news they can’t make payroll at the end of the week, in spite of a strong backlog.

Protection from Subcontractor Issues

Right now subcontractors are facing the burden of a substantial backlog for the first time—with those woes compounded by lower labor availability and rising cost pressures. Since subcontractors have been working on slim margins for the past four years, there is less room for error and mismanagement, as well as an elevated potential for default.

To manage these issues, general contractors must closely consider the risk profile of their subcontractors and give themselves a full degree of protection from performance or default issues. One of the more comprehensive protection tools for general contractors is a surety bond. Bonding a subcontractor has a proven record of success. While there are alternatives to surety bonds, many general contractors see the value of surety to manage subcontractor default risk.

A reputable surety company performs a full degree of due diligence on the subcontractor—from evaluating capabilities to work-in-progress schedules to balance sheets—before granting a bond. Through the process of obtaining a surety bond, the general contractor benefits from a prequalification of the subcontractor. The surety underwriting process helps ensure that a subcontractor has a certain level of strength and can execute the contract. The surety then stands behind that analysis by issuing the bond—guaranteeing that either the subcontractor will perform or the surety will step in to make sure the contract is completed.

The Power of the Surety Bond

Potentially devastating risk may arise as a subcontractor’s backlog increases. If the general contractor wants to avoid any unforeseen curveballs along the way, there are many ways to identify those risks before they occur. Prequalification is one tool that all general contractors should use. Establishing and following a rigorous prequalification procedure is key—although following those prequalification procedures can be more difficult than some contractors imagine. There are many cases where a local project manager overrides the prequalification requirements with the rationale of “we know these guys,” only to have that subcontractor go quickly into default.

Surety bonding is a method to help protect owners and general contractors in the event of subcontractor default in the following ways:

- **Prequalification assurance.** With a surety bond, the general contractor is assured that the subcontractor’s capability to execute the contract has been analyzed by the surety. Surety underwriters are trained to evaluate subcontractors and determine the projects—from a size and complexity perspective—that the companies can undertake.
- **Performance guarantee.** Losses due to subcontractor failure can be covered with a surety bond. In addition, the general contractor knows that the surety company can step in to help, should a default occur.
- **Cost-effective protection.** The price of the surety bond is a small price to pay, given what is at stake should the subcontractor fail to perform. The third-party financial backing and risk transfer of a solid surety can make up for the expense of the bond. A reputable surety company will look favorably on a subcontractor bond.

It may take several more years for the average number of months of backlog in the field right now to decrease. Contractors should consider surety bonding as a tool to help protect themselves from potential financial losses or

project delays caused by subcontractor default. The stakes are just too high.

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¹ Gopal, P. "PulteGroup Slides After Builder's Earnings Miss Estimate," Bloomberg, October 22, 2015, <http://www.bloomberg.com/news/articles/2015-10-22/pultegroup-slides-after-homebuilder-misses-earnings-estimates>

² Korman, R. "Trainor Glass Default Raises Questions About Sub Vulnerability," Engineering News-Record, March 14, 2012, <http://www.enr.com/articles/12658-trainor-glass-default-raises-questions-about-sub-vulnerability>.

³ "Craft Pay Ramps Up As Worker Gaps Grow," *Engineering News Record*, October 7, 2015, http://enr.construction.com/business_management/workforce/2015/1007-pay-ramps-up-as-worker-gaps-grow.asp#.Vi4EBcgoZjo.mailto

⁴ *ibid*

⁵ *ibid*

⁶ Associated Builders and Contractors, Construction Backlog Indicator, Q4 2015

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A Blueprint for Risk Management in Construction

 fmiquarterly.com/index.php/2016/06/14/a-blueprint-for-risk-management-in-construction/

Nine elements that should be included in every construction firm's formal risk management strategy

Construction is all about managing risk. Whether the concern is employee safety, contract terms, subcontractor selection, material choices or another one of the myriad issues that go into a successful project, at some point or another, every juncture comes with its own level of risk. By conducting a formal corporate wide risk assessment and implementing a risk management process, construction firms can more effectively recognize, address and mitigate potential risks before those issues develop into negative outcomes.

In today's construction environment, managing risk is no longer just a defensive strategy. It's not enough to just sit back and hope that a problem won't happen, because it most likely will. The more sophisticated and formalized a company's risk management processes are, the more opportunity a contractor has to profit from mitigating and managing the associated risks.

In this article, we explore the underlying reasons for developing a solid risk management program in construction, show why it's smart to take a holistic view when developing a plan of action, and outline the nine key elements—based on our industry research—that should go into every firm's risk management blueprint.

Memorable Quotes From The Video:

[“Compared to 5 years ago, risk management has become a much more strategic initiative for contractors.”](#)
[“90% of contractors are changing the way they do business in response to all of the new risks.”](#)

You're in the Risk Management Business

Contractors work in an inherently risky business. Tight time frames, multiple stakeholders up and down the value chain, and dangerous working conditions are all “just part of the job” for contractors. Risks are so common, in fact, that contractors can become numb to the wide range of issues that they face (or could face) on a daily basis.

The ever-changing construction market has added fuel to the fire. Good, bad or indifferent, all contractors are now operating in a new post-recession landscape characterized by tighter margins and less room for error. The days of high margins and favorable contractual language are gone. Owners are more educated, the competition is tougher, and companies are facing acute skilled labor shortages. As a result, businesses are running fast and hard, and increasing their risk exposure while decreasing their prices. It's the perfect storm that can ultimately lead to company failure and bankruptcy (see our FMI Quarterly article on “Why Contractors Fail”).

In this new business landscape, contractors must manage risk differently than they did just five years ago. This notion was confirmed in a recent study where AGC and FMI surveyed the general and specialty contractors in AGC's Surety Bonding and Risk Management Forum: More than 90% of survey respondents stated that they were managing risk differently compared to five years ago.¹

“If you’re in the business of contracting, you’re really in the business of risk management. We’ve been awakened to new processes and procedures that allow risk management to become a key focus of our business. Today, our business is much more predictable and clients hire us due to our capability of taking out the risk and uncertainty in complex projects.”

— Ken Ames, Corporate Risk Manager at Layton Construction

Based on our ongoing industry research, FMI has witnessed and helped successful construction companies reinvent their risk management practices and turn them into intentional and formalized programs at the enterprise level, rather than piecemeal or reactive on an individual basis. This is a very different approach compared to how risk has been managed historically and allows contractors to take a more holistic and strategic view of their business. Using a formalized risk management process centered on potential risks (i.e., compliance, finances, fraud, customers, etc.) and specific actions that *address* those risks, firms can take steps to support the overall organization in its quest to minimize risk. Rather than viewing risk as an inevitable evil, risk-averse firms have embraced it as a strategic opportunity.

Playing Offense and Defense

Let’s face it — risk management is not a new concept for anyone in the industry, and it’s not something that can simply be mandated. Like safety, risk management requires constant communication, education and efforts to build awareness and provide value to both employees and clients.

Alex Munoz, vice president of safety and risk management at Messer Construction Co., stated, “One of the easiest ways to create a corporate culture around risk management is by making it everyone’s job. That means moving from an ‘It’s the department’s role’ mentality to one that says, ‘We share a job, and that’s to create a risk-aware culture.’”

Many firms are taking this enterprise wide approach to risk management with two overarching objectives: offense and defense. Here’s the difference between the two:

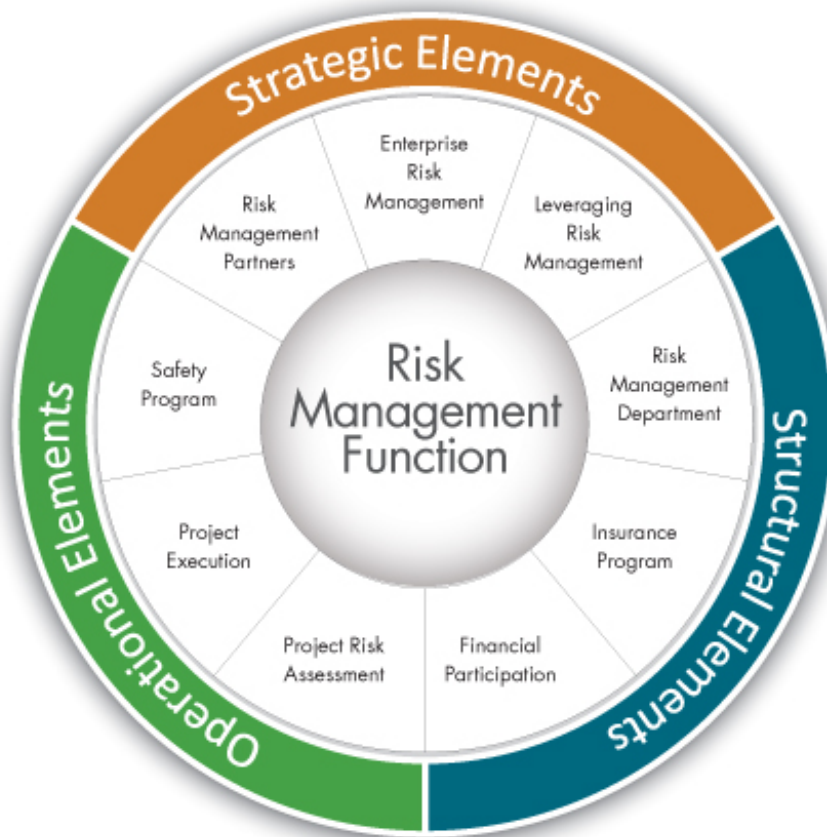
- **Offensively**, risk management aims to increase the value of the business by formalizing risk tolerance, potentially increasing profit margins and stabilizing earnings.
- **Defensively**, risk management protects the business by guarding the balance sheet, profits and legacy of an organization.

Firms that want to do a better job of managing risk—or launch an entirely new, formal program that tackles the issues outlined in the beginning of this article—must incorporate a mix of offense and defense. Digging down to deeper levels of understanding, FMI has identified nine elements that should be included in a formal risk

management strategy. By incorporating these elements and taking a more holistic approach to risk management that goes beyond just insurance or safety programs, firms can begin to realize the positive impacts of their efforts.

Here are the nine key elements—organized into three primary categories—that should be included in your firm’s formal risk management plan (Exhibit 1):

EXHIBIT 1 | BLUEPRINT FOR RISK MANAGEMENT



Source: Model developed by FMI.
Concept is based on in-depth industry research.

Strategic Elements

Enterprise Risk Management — The traditional approach to risk management involved a “siloesd” approach in which individuals (or teams) were only responsible for risks that impacted their respective siloes, with the assumption that someone else would manage the other risks. An enterprise approach to risk, on the other hand, involves the collective identification, assessment and management of risks that a business faces. This occurs not just on a local level or within its



business sector, but on a global level in areas that may not correlate directly to the business. This global perspective can help leaders identify risk areas more clearly and serve as an important precursor to strategic planning.

“Everyone in the company is now included in our risk management practice,” said Dallis Christensen, CFO at Layton Construction. “Our superintendents are more involved with both quality and safety issues, project managers might be looking at subcontractor or owner contract clauses more closely, and our estimators review our subcontractors’ pre-qualifications and financial strength in much more detail.”

Risk Management Partners — As in any business, the right partners are vital to a firm’s success. In the construction industry, those partners include both insurance and surety partners that possess construction industry expertise, commitment to the construction industry, industry-focused research (e.g., emerging issues) and sufficient bench strength. The top insurance brokers and companies in the industry understand their clients’ business and serve as strategic partners, equipping companies with the right suite of products to navigate an ever-changing marketplace.

Leveraging Risk Management — As the industry has evolved, contractors have had to shift how they view risk management. Today, best-in-class firms are able to protect themselves better, increase the value of their organizations, and identify new ways to improve profit margins. At its essence, company leaders are starting to accept and manage appropriate risks that have the potential to add value to their businesses. This is a far cry from the past, when contractors had a fairly consistent knee-jerk reaction to risk, either refusing to accept it in the contract and/or immediately passing it on to others (i.e., subcontractors and suppliers).

Structural Elements

Financial Participation — The majority of today’s construction leaders lack a full understanding of their company’s risk tolerance. In other words, they may be exposing their businesses to more potential economic loss than they can tolerate, either reputationally or financially. On the flip side, some companies have risk management functions that are benefiting others more than they should (e.g., owners, insurance carriers, competitors, etc.). This so-called financial over- or under-participation can make or break a firm and represents a critical step in balancing risk versus protecting the balance sheet.

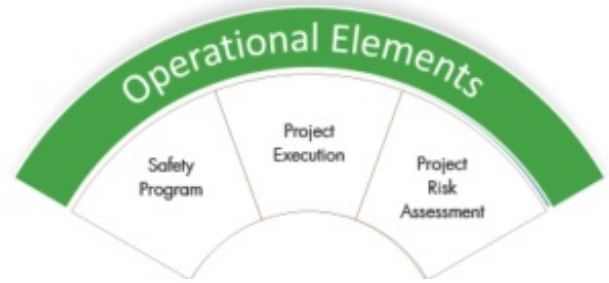


Risk Management Department — Leading contractors have a formalized risk management department embedded in their organizations, led by a professional (usually full-time) risk manager with a defined role and specialized responsibilities. This role should not be relegated to an outside broker, de facto safety manager or someone else in the organization. Risk managers contribute significantly to the overall management of a construction business and should have a seat at the executive table, embedding risk management into the corporate strategy.

Insurance Program — The role of insurance is simply to allow companies to “rent” the insurance company’s balance sheet when risks and the potential losses exceed an organization’s risk tolerance. Understanding that need for protection, companies must ensure that the suite of insurance products sufficiently protects their balance sheet and earnings stream—should something undesirable occur. The key is to have an insurance program that appropriately matches the risks of the company’s specific business and exposures.

Operational Elements

Project Risk Assessment — Leading contractors have a systematic and consistent process to evaluate and analyze potential project risks prior to pursuing a project award. This process involves a team of internal experts with specialized experience who review key areas of project risk (i.e., contract terms, constructability, financing, partners, location, logistical issues, equipment needs, etc.). Armed with a clear understanding of their enterprise risk tolerance as well as a strong project risk assessment, contractors are better-equipped to incorporate appropriate contingencies and margins on specific projects, which ultimately results in more accurate job costing.



Safety Program — All contractors have safety programs in place these days, but the leading organizations have created a *culture of safety* throughout their organizations and up and down their value chains. Leading organizations also aggressively track and manage claims—focusing on the process and the costs, including robust return-to-work programs—and understand that safe jobs tend to be profitable jobs. A strong safety program not only has the “right” components, but it also has the appropriate measurements and metrics in place to monitor performance and accountability.

Project Execution — Whether acting as a subcontractor or a general contractor, there is an inherent and obvious risk in executing a project. When a contractor’s operations involve subcontractors and vendors, that contractor still has both financial and reputational risks on the line—yet someone else is doing the work. With this dynamic in mind, it’s easy to understand why subcontractor management is a key focus for leading firms.

Steps to Success

The idea of managing risk as an “offensive” strategy is not a new concept. Best-in-class companies understand the value of a formalized and intentional risk management program and long ago embraced the idea of strategic risk management. Whether in reaction to tight markets with demanding and impatient stakeholders, or with the foresight to see the advantage of this type of planning, the industry is evolving its view of risk management. As the industry continues to change, and as executives spend increased time considering risk, this model of best-in-class risk management will serve as a blueprint for success.

¹ Key findings of this study “Managing and Mitigating Risk in Today’s Construction Environment” will be published by AGC and FMI in June 2016.



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The Icarus Leader: How High Will You Fly?

 fmiquarterly.com/index.php/2016/06/14/the-icarus-leader-how-high-will-you-fly/

As a leader, have you gone through times where successes of the past have clouded your judgment, leading to lost profits, defeat or failure? In the construction industry, we face the delicate leadership balance of taking the necessary risks to grow and benefit the company without tipping the scales too far in either direction.

In FMI's comprehensive study "Why Contractors Fail," we identify several root causes for company failure, including a phenomenon we call "the mind of the contractor." A mindset characterized by overconfidence, an excessive ego and hyper-optimism, to name a few, can all contribute to the success of an individual leader, yet result in the company's demise if taken too far.

Still relevant today, we take a deeper dive into five of the eight original characteristics that make up the mind of the contractor and provide insights and recommendations on how leaders can keep these important attributes in check.

Memorable Quotes From The Video:

["Most contractors have a very high tolerance for risk."](#) ["Sometimes the same characteristics that bring incredible success for contractors can also be the cause of their downfall."](#)

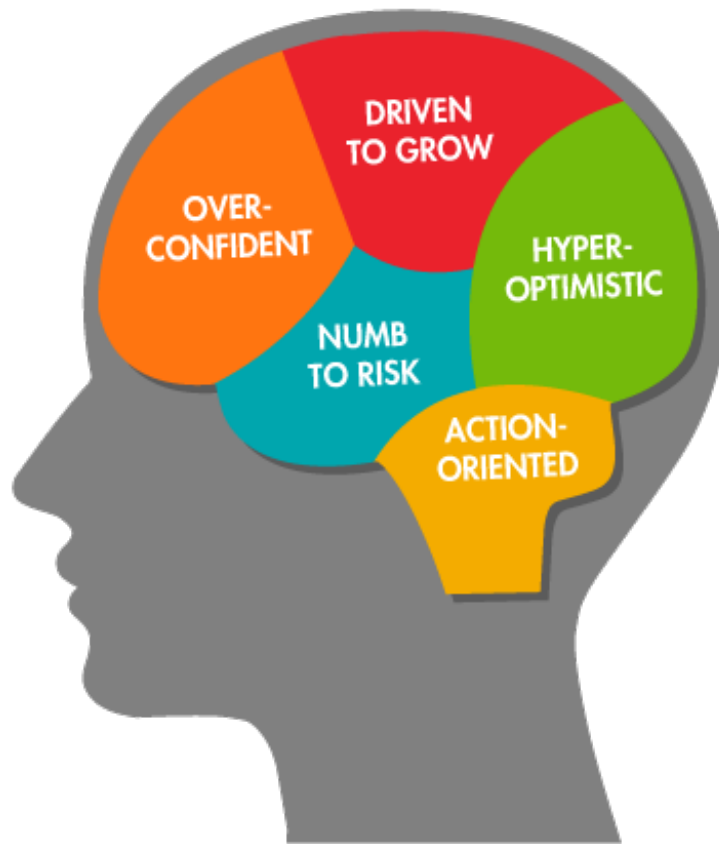
Icarus: A Close Look Into the Mind of the Contractor

In the story of Icarus, he and his father Daedalus are prisoners who escape by building wings on a wooden frame and using wax as glue. A common theme in Greek mythology, the idea of punishing overambition comes to light when Daedalus warns his son not to fly too close to the sun since wax melts when heated. Acting recklessly, Icarus flies too high. The wax melts, and the contraption crashes into the sea.

This example from Greek mythology correlates directly with the risks that entrepreneurs take every day, and the understanding that not all new ideas, strategies or ventures will be successful. This is particularly true for the construction industry, where one bad project can ruin a company.

In our research spanning more than a year, we found that individuals who start and lead construction companies have certain propensities or mindsets that can set their companies on a path to success or failure. Five such characteristics are shown in Exhibit 1 and are based on in-depth stakeholder interviews, FMI's experience working with contractors, and comparative results from accepted personality tests such as the Myers-Briggs Type Indicator. Generally, if you are a contractor, or if you know those who lead and own construction firms, most characteristics on this list will ring familiar.

MIND OF THE CONTRACTOR (FIVE SELECT CHARACTERISTICS)



Source: Model developed by FMI. Concept is based on in-depth industry research.

Understanding the razor's edge on which contractors balance each day creates opportunity to examine deeper motives and gain personal awareness in order to prevent those small but deadly missteps. Following are detailed descriptions and real-life examples of five key personality traits that comprise part of the contractor mindset.

Driven to Grow (versus Practicing Rigor Through a Clear Vision and Strategy)

The industry mantra, "If you're not growing, you're dying," is one that FMI consultants come across daily. Particularly in an economic upswing like today, construction firm leaders are tempted to go after the newest and latest boom markets, often expanding into areas beyond their expertise. This is where things can turn bad very quickly.

For example, one general contractor was very profitable for over a decade, hovering in its revenue sweet spot of around \$65 million to \$70 million. “I remember a season when I was determined to get us over the \$100 million barrier,” said the founder. “Worst years of my life. Almost lost my wife and my health. We were taking anything and everything to get us to that target. When we reached that level, I discovered we were no more profitable and much less effective. For us, growth for growth’s sake is almost always a mistake.”

“I think that driven to grow in the absence of a clear purpose—a clear why—can be a major problem.”

— Jake Appelman, Principal with FMI’s Center for Strategic Leadership

Many contractors have echoed this client’s experience over the years, often evaluating a growth opportunity by one measure only: assessment of current talent. *Do we have the people to pull it off?* However, there’s an even more fundamental issue to consider. The best safeguard to balancing that instinctive “drive to grow” is by having a clear vision of where you are going.

In other words, the big question of, “Where are we headed?” comes first and serves as the filter by which opportunities must be evaluated. For all leaders, having a clear understanding of *why* the company exists, *how* it operates, and *where* it is going provides the necessary guardrails to prevent dissociated growth and expansion.

Numb to Risk (versus Evaluating Risks Objectively)

The Icarus Paradox showed us how excitement and elation of success ultimately clouded Icarus’ judgment, causing ultimate failure. Many construction CEOs excel because they have an entrepreneurial spirit coupled with a high-risk tolerance. In addition, research shows that as company leaders advance, their risk aversion declines.¹ Adequate capital reserves and constraints can sometimes counterbalance such detachment. However, if leaders rely on past successes to continue their prolific triumphs with no consideration to changes in the market and their companies, they too may face the same fate as Icarus.

One instance involved a heavy/civil contractor who was tremendously successful at one level, but became addicted to the adrenaline of “walking the high wire without a net.” This contractor ended up going bankrupt because it knowingly took on a job with a bad contract, but thought it could pull it off anyway. It was a high-risk move with razor-thin reserves. In spite of a lifetime of successful high-wire walking, this time the contractor fell—and there was no safety net.

Hyper-Optimistic (versus Balancing Optimism and Realism)

One of the reasons we so enjoy our work is because we spend our days with some of the most optimistic people imaginable. But even optimism has a dark side. The belief that “it won’t happen to me” has driven many construction companies out of business over the years.

In a classic study published by Harvard Business Review,² the authors stated that, “When forecasting the outcomes of risky projects, executives all too easily fall victim to what psychologists call the “planning fallacy.” In its grip, managers make decisions based on delusional optimism rather than on a rational weighting of gains, losses and probabilities. They overestimate benefits and underestimate costs. They spin scenarios of success while overlooking the potential for mistakes and miscalculations.”

We witness this kind of hyper-optimism with our clients on a regular basis. Of course, we’re not saying that optimism is bad, or that it should be driven out of organizations or leaders, but generating realistic projections by implementing disciplined operational and financial practices is extremely important. This will help avoid disastrous missteps in project selection, planning and execution in the long term.

Overconfident (versus Incorporating Effective Teams and Analytics Into Decision-Making)

In our experience, most construction leaders trust their own intuition on major decisions—and often see great results. Leaders in the construction industry frequently come up through the ranks, managing projects and executing on big work. Big egos get bigger, and this can-do attitude leads to greater successes. Nevertheless, there's an eventual tipping point. An over-reliance on one's own intuition can lead to fatal consequences, particularly when leaders neglect in-depth analytics or council of others during important decision-making.

Hugh Rice, senior chairman at FMI and one of the authors of "Why Contractors Fail," explained, "It's an ego-driven business. To be a contractor, you have to be an optimist and believe you can do what you are setting out to do because you are confident you can do it. When you think you are invincible, you do it until at some point you get smacked upside the head."

As one contractor confirmed, "One of the reasons I started this company in the first place was so I didn't have to listen to anyone else!" At FMI's Center for Strategic Leadership, we see several valid options for an intuitive leader to become even more effective by letting others have a voice. For example, a well-functioning executive team where the "get-work," "do-work" and "keep-score" people can all have a voice in decision-making will counter the unbridled overconfidence that can develop after a long run of successfully defying the odds as an individual leader.

Action-Oriented (versus Taking the Time to Think)

Myers-Briggs Type Indicator (MBTI) personality tests are based on the assumption that everyone has a natural leadership style that corresponds with his or her own personality type. The key types are: Introversions (I) versus Extraversions (E), Sensing (S) versus Intuition (N), Thinking (T) versus Feeling (F), and Judging (J) versus Perceiving (P).

After 20 years of running over 200 Leadership Institutes and countless other programs utilizing the MBTI profiles, we discovered that almost 50% of all construction leaders fall into two personality categories: ESTJ or ISTJ.^[3] The combination of Sensing, Thinking and Judging preference types (in combination with Extrovert or Introvert preference) result in an experienced-based, action-oriented mentality.

These _STJ leaders rely on facts and knowledge-based premises and are hard-wired to take action for their decisions. The "J" or "judging" preference indicates a longing to close on decisions and move forward—in other words, an itchy trigger finger. This predisposition to action can prove to be a strength when executing plans and processes, but becomes a liability when the big picture and additional options are ignored or midcourse corrections are not taken (because ultimately, the decision and course have been set).

Keeping Your Ego in Check

The winning mindset for a contractor is a delicate balance between seemingly contradictory forces. In our industry, confidence, optimism and a drive to excel are core attributes. To avoid the Icarus trap, consider the following:

- Request feedback from your executive team, and act upon it.
- Conduct regular anonymous employee surveys or 360° reviews and take action on the feedback.
- Join a peer group or generate a circle of trusted advisors.
- Utilize an outside coach to accelerate professional growth and overcome obstacles.
- Put together an effective board of directors, including wise counsel from outside the company.

- Surround yourself with an effective team, bringing other people and minds to the table to make significant decisions as a company.
- Always fact-check your decisions and choices. Develop a framework for making the right decisions and learn when to say “no.”
- Distinguish opportunity from strategy. Always ask yourself, “How does this help us accomplish our purpose and vision?”

Time is money. Slowing down to assess our blind spots and process decisions with a leadership team take valuable time. If we compare this with planning versus execution, it is often the time that we spend on the front end that pays long-term dividends. That makes it even more imperative to have a clear vision and strategy, maintain adequate capital reserves, bake into your company the best possible processes and advisory systems available, and bring the right people to the leadership table. These practices tip the scale toward continued success and can mean the difference between a heart-pumping rise to the heights and a bone-crunching fall.

[1] Survival of the Fittest. DDI.

[2] Delusions of Success: How Optimism Undermines Executives’ Decisions. Dan Lovallo and Daniel Kahneman. Harvard Business Review. July 2003.

[3] Data from MBTI is used with permission and not tied back to the individual or shared beyond the one-on-one interaction with the individual.



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Keep Score to Reduce Risk

 fmiquarterly.com/index.php/2016/06/14/keep-score-to-reduce-risk/

How to improve risk management by creating a corporate culture that's focused on knowledge sharing, collaboration and learning

In today's construction industry, the pace of change and the speed of information flow are transforming the business landscape, escalating risk and intensifying vulnerability at all organizational levels. Technology is accelerating this trend, but technology isn't knowledge. It is, however, an effective tool for capturing, storing, retrieving and manipulating data from which knowledge can be gleaned. Over time, the knowledge accumulated by a group of people within an organization becomes the intellectual capital of that organization—a key asset in today's competitive engineering and construction markets.

Memorable Quotes From The Video:

“People don't realize profit for GCs is somewhere in the 2% pre-tax range so there's no room for mistakes.” “To gain valuable fact-based knowledge, sort your completed contracts by customers, type of work, lead source, etc.”

Many construction firms struggle with leveraging the intellectual capital of their employees for many reasons, including the widely varied roles of individuals within construction firms; the project-based structure of the organization; the fact that individuals can work for extended periods without seeing their peers; and the inherent fragmentation of the highly decentralized construction industry. These factors all hinder knowledge sharing and result in sub-optimizing of the firm's intellectual capital. They also lead to continual reinvention of the wheel and repeated mistakes.

To offset these challenges, successful companies are implementing tools and processes that help them learn from their successes and mistakes while answering the questions, “What do we want to repeat successfully? What do we want to avoid in the future?” By analyzing past mistakes and successes, companies can lower their risk profiles. Based on research that spans several decades, FMI has found that the following two practices can have a critical impact on a company's bottom line and risk profile:

“If you do something incorrectly, it is a learning moment. If you do something incorrectly more than once, it is a mistake.”

— President of a large general design-build construction company

- Completed Contract Analysis (CCA)
- Post-Project Review (PPR)

This paper discusses these two practical approaches to controlling risk and provides recommendations on how to get started with an effective culture for managing risk.

Understanding Your Margins

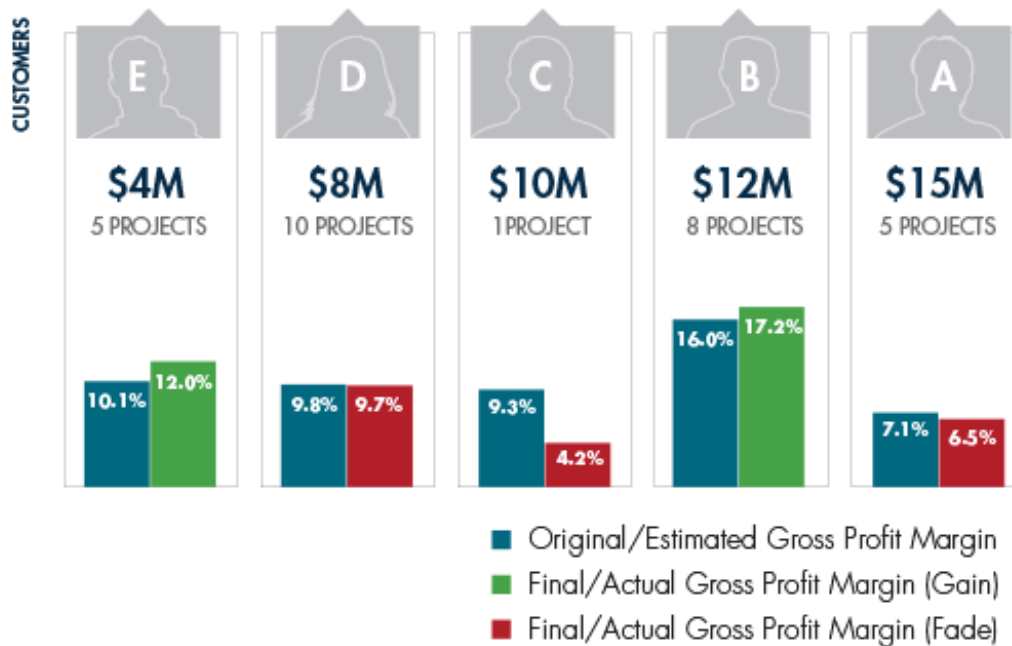
Based on FMI's experience, best-in-class contractors are truly students of their businesses and fanatical about understanding margins (defined as revenue minus direct costs of construction). In an industry where any slight schedule slip or claim can significantly impact gross margins, comprehending historical project performance in the context of gross margin and direct costs is critical. Analyzing completed projects or contracts helps project teams improve and refine their future work acquisition strategy and project efforts, as well as identify areas for operational improvements. The Completed Contract Analysis can be divided into two key areas: gross margin and direct cost.

Margin Analysis

Margin gain and margin fade are fundamental metrics for analyzing gross margin. Gross margin gain is an increase from original estimated gross margin to final actual gross margin, while gross margin fade represents a decrease. Every job has some degree of gain or fade. The key is to focus on the frequency and severity of those fluctuations. If gross margin fade occurs more frequently and more severely than gross margin gain, for example, direct cost estimates may be too aggressive. However, if the large gross margin gains are frequent, then direct cost estimates may be too conservative. Essentially, true gross margin is buried in direct costs as "fluff." The term "sandbagging" is frequently heard in these instances. These broad-stroke estimating dispersions are cast in the context of the current operational performance of the business. The effectiveness of a given contractor's operations is also a driver of margin gain and fade (see Exhibit 1 for example).

Beyond an aggregate view of gross margin gain and fade, project teams can gain important insights by analyzing historical data based on project characteristics (e.g., project revenue size, type of work, customer and geography). These different gross margin performance assessments will ultimately help contractors understand what types of projects are in their "sweet spot" in terms of their ability to accurately estimate and effectively perform. Slicing the data characteristics also helps firms gain an objective view of which projects have (and haven't) been high-risk in the past and use that information to make future decisions.

MARGIN ANALYSIS BY TOP FIVE CUSTOMERS



Source: FMI Data Analytics

Direct Cost Analysis

Gross margin fade is primarily driven by the additional change order work priced at margins below the original contract margin or direct cost overruns. The latter is the most common driver of gross margin fade and has the potential to create substantial project losses. Therefore, it is important to understand your direct cost variability. More insightful than total direct cost overruns/underruns is the ability to analyze each type of direct cost by exploring a direct cost profile. Labor is the most variable direct cost and highest risk to manage, followed by equipment (depending on how labor-intensive and equipment-intensive the work program is). Understanding the magnitude of and reason for direct cost overruns/underruns is extremely powerful for firms looking to improve performance and reduce risk.

Similar to gross margin analysis, gaining value from reviewing direct cost variability by project characteristics is a simple task. For example, if you knew that large, out-of-town work experienced significant labor overruns (disproportionate to the remainder of the work program), you would adjust your risk profile by making more conservative estimating assumptions for this type of work going forward (Exhibit 2).

DIRECT COST OVERRUN/UNDERRUN

	Revised Estimate	Final Actual	\$ Variance	% Variance
Labor	\$43,545,672	\$51,033,245	\$7,487,573	17.19%
Materials	\$17,456,903	\$15,010,301	(\$2,446,602)	-14.02%
Subcontracts	\$51,200,954	\$50,095,674	(\$1,105,280)	-2.16%
Equipment	\$26,734,621	\$29,457,322	\$2,722,701	10.18%
Other	\$2,878,902	\$1,275,431	(\$1,603,471)	-55.70%
Total Direct Costs	\$141,817,052	\$146,871,973	\$5,054,921	3.56%
Labor Hours	503,421	555,178	51,757	10.28%

Source: FMI Data Analytics

The Hidden Dangers in Data Analytics

Construction teams or executives should not make hasty decisions based solely on the completed contract analysis. Oftentimes, other factors such as unexpected market dynamics or owner demands play into this whole equation too and need to be considered in the broader business context.

If the results of your completed contract analysis are inconsistent with your recollection of project performance, you may be a victim of bad data. Update change orders regularly and recognize the savings or overruns rigorously. Without this practice, much of the analyzed data could be worthless. Remember that success in construction is as much about which projects you say no to (proper risk assessment on the front end), as it is about which projects you pursue.

Learning from Risks: The Importance of Post-Project Reviews

Don't neglect the all-important post-project review (PPR). The effective use of PPR serves as one of the most reliable strategies for reducing project risk failure and gaining the most value from the project management function. Risk management improves significantly through learning from past project performance and capitalizing on learning opportunities.

FMI has found that PPR plays an integral role in helping project teams capitalize on the "intellectual equity" gained from each project. By drawing on important lessons learned, construction firms can establish best practices going forward and avoid past mistakes. This is even more essential as young, inexperienced workers enter the workforce and older generations with decades of industry experience and knowledge retire.

For example, at completion, the job cost report includes the financial details of all project aspects: the initial estimate, change orders (approved and unapproved), actual job costs and comparisons of estimated costs compared to final actual costs incurred. From this data, firms can assess actual production rates as compared to estimated production rates and feed them back to estimating for updating the estimating database. Understanding actual crew performance provides opportunities for both developing best practices and improving areas where performance was substandard, while material and other direct cost variances give insights into actual performance capabilities.

Here are five key benefits that an effective PPR provides:

1. Consistently developed and applied project measurement standards
2. Improved (and better structured) communication from upper management through foreman
3. Evaluation of individual performances on each project (this provides valuable opportunities for feedback and improvement)
4. Project members who are focused on safety, change order management and productivity
5. "Closure" on each project and a vehicle for continuous quality and profit improvement

Making the Commitment

Based on FMI's experience, the majority of today's construction firms lack effective processes for analyzing their project performance and risk profile. This happens for several different reasons, including:

- The pressures of time and workload
- Lack of established assessment criteria or procedures
- Inability to recall project information
- Fear of blame over project failures or issues
- No relevant data collection and analysis expertise
- No leadership support
- Lack of incentives or assessments

To overcome these obstacles, construction firms can start with these four steps to developing a culture of knowledge sharing, collaboration and learning:

1. **Build a Culture of Trust.** Trust is a key component of a successful knowledge sharing culture. Effective knowledge management initiatives can help break down cultural barriers and change how individuals share information across the organization. However, most people will not risk sharing knowledge without an established level of trust between employee and employer. For this reason, employers must work to develop trusting relationships with employees.
2. **Provide a Process and Structure.** Develop a knowledge management system that aligns with your organizational structures and processes and that encourages collaborative knowledge sharing across groups of employees. This collaborative approach can empower employees by allowing them to define knowledge in their specific areas of expertise and ultimately to share that knowledge. The two processes described in this article convert data into meaningful knowledge for project teams. Reams of data are not information.
3. **Motivate and Reward.** Companies that reward their employees for knowledge sharing recognize the value and importance of such activities. By instituting rewards and incentives for knowledge sharing, companies also prove their commitment to helping employees reach their potential. Consequently, such reward programs can also help increase employee engagement and retention, while also fostering a knowledge sharing culture.
4. **Accept Mistakes as a Way to Learn.** Successful companies have an open culture around mistakes and "learning moments," which can help them gain deep insights into those learning moments and prevent repeated mistakes over time. This requires leaders who encourage their employees to test and try new things in a safe setting without putting projects or people at risk.

While the challenges to successfully implementing a knowledge sharing culture are significant, the potential benefits to construction firms are significant. Effective tools and processes such as the Completed Contract Analysis and the Post-Project Review can leverage a construction firm's organizational knowledge to drive consistent, high-level

performance and profitability, and a long-term strategic advantage.



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Developing Adaptive Leaders: The APi Case Study

 fmiquarterly.com/index.php/2016/05/18/developing-adaptive-leaders-the-api-case-study/

How one construction conglomerate is developing effective leaders across 40 different companies and 200 geographically dispersed locations.

Leaders in the construction industry have long dealt with volatility, uncertainty, complexity and ambiguity (“VUCA”) on a daily basis. In fact, VUCA is part of the industry’s DNA. Today, though, the pace of change and the speed of information flow are transforming the global business landscape more than ever, escalating risk and vulnerability at all organizational levels.

In the construction industry particularly, the failure rates associated with untested, uninformed decision-making have pushed executives to become vastly more creative, flexible and nimble when it comes to identifying and managing risk, leading people and solving problems. Unfortunately, many of today’s construction leaders are ill-equipped to deal with their companies’ many moving parts and are now seeking innovative ways to develop their leadership capabilities.

The following article illustrates how one industry icon, APi Group, Inc., has developed a successful model for developing great leaders across multiple organizational levels.

Memorable Quotes From The Video:

[“Leaders must have agility – they have to be able to adapt.”](#) [“Our focus on leadership development led us to our current success.”](#)

Unleashing Tremendous Energy and Power

With more than 40 independently managed fire protection, industrial and specialty construction companies and 200 locations in its portfolio, APi Group of New Brighton, Minnesota, has made a name for itself by building leaders that blend the personal attention of small to medium-sized construction companies with the strength of an industry leader.

According to Dan Wooldridge, APi Group’s strategic leadership advisor, the company’s vision and strategy both flow from its core purpose, “Building Great Leaders.” “Collectively, we know that the thing that gets us up in the morning is our passion to build great leaders,” said Wooldridge.

With leadership development as its core purpose, it just makes sense that APi Group would focus on creating an organization where everyone is a leader. “We don’t view leadership as a role or a box on an organizational chart; we define leadership as the ability to influence others towards our vision,” Wooldridge said. “We all influence someone every day. It could be a peer, partner, customer or team. We knew that if we could take the roughly 15,000 people of APi Group and ensure that everyone understood his or her respective leadership role, that we could unleash tremendous energy and power toward accomplishing our business goals.”

The fact that APi Group is not a single, monolithic company could have stood in the way of the company’s leadership development goals, but Wooldridge said the firm tackled that challenge head-on. “We’re a family of diverse companies,” he explained. “Though each business has different goals, objectives, markets, cultures and teams, we’re aligned around our core purpose.”

According to Wooldridge, another obstacle to building great leaders is rooted in the fact that many people simply don’t understand what leadership really is. Since the early 2000s, the company has participated in a number of leadership development programs, including FMI’s Leadership Institute, as well as many of its own programs, to work through that issue and to define what it means to be a good leader.

For example, three times a year, APi Group's presidents and senior leaders converge and participate in leader labs and a presidents summit. Over several days, these individuals learn, collaborate and participate in leadership development. "When our leaders get together," said Wooldridge, "the amount of peer-to-peer learning and support among them is just tremendous. For example, this next fall, all our presidents will gather on the battlefield of Gettysburg, accompanied by historians and military leaders, to study the leadership lessons that can be applied from this historical event."

Today, APi Group is at a transition point. Wooldridge explains, "We're maturing as a company from the point of not only just being good leaders, but also actually being the people who know how to build great leaders."

Achieving that goal requires a different mindset that includes not only business acumen but also a knack for developing other leaders within that specific business. This mindset requires a new level of thinking, skill sets and prioritization on how a leader uses his or her time. "Getting through that mindset change is definitely a challenge," said Wooldridge, "but it's a necessary shift in thinking."

Developing Field-Level Leadership

In the risk-averse construction field, much attention is paid to developing senior-level leaders and managers, with little or no thought given to the field leaders who are out on the front lines working with customers every day. Often brought up through the ranks—and promoted accordingly—project managers and field leaders don't always get the same level of attention that, say, a company vice president or COO would.

That scenario plays out quite differently at APi Group, where field employees comprise about 80% of the company's total employee base. Acknowledging the fact that this segment has been "historically underserved" in terms of development, Wooldridge said these individuals make the important, day-to-day decisions that impact the company's bottom line—a fact that no construction firm can afford to ignore. "Our field leaders do most of the hiring, they interact with our customers, they make the daily financial decisions," said Wooldridge, "and they are truly the heart and soul of our company's culture."

In recent years, APi Group has taken steps to accelerate field leadership development. The firm just finished up its fourth Field Leadership Institute and plans to make this a permanent part of its leadership development activities. "We're also doing regional visits and follow-ups with attendees to ensure that there is a unified culture to break down the walls between the field and the office," Wooldridge said. "It's all about bringing our field leaders into the conversation and into the equation."

Preparing for Risk

Knowing that risk could be lurking around the corner on any job site, at any one of its 200 locations, or across any of its 40 different companies, APi Group takes risk management very seriously. According to Wooldridge, the firm starts by ensuring that its leaders are ready, willing and able to lead themselves first. In other words, the greater their self-awareness, the better the odds that their influence flows out of their character and authenticity. This, in turn, translates into the individual leader's ability to respond to changes while developing to his or her full potential.

To best prepare employees to work in a risky business environment, APi Group focused on three different areas (Exhibit 1):

1. **Leading Self**—Influence flows out of individuals' character and authenticity, as does a clear understanding of their unique talents and personality. This, in turn, helps individuals respond to changes, continue learning and develop their full potential. "We work with them on their ability to learn, use good judgment, and bring out the best in others," says Wooldridge.
2. **Leading Others**—It sounds straightforward in theory, but teaching someone how to lead isn't always easy. To overcome this obstacle, Wooldridge says APi Group helps its existing and potential leaders understand how they influence others, how they communicate, and how they interact with others to bring about change.

3. **Leading Teams**—Leaders are constantly leading either ad hoc or long-term teams of people. They need to be effective in leading teams before they can even be effective in leading businesses. They also need to be able to leverage the strengths of a team to make better decisions and execute more effectively. To achieve these goals, Wooldridge says APi Group helps leaders develop foundational thinking and how to help others develop and move through their own lives and careers in the most appropriate manner possible. “We’re developing employees who can think and respond based on our core purpose, values and ideology,” says Wooldridge.



APi LEADERSHIP DEVELOPMENT MODEL



Source: Image provided by Dan Wooldridge, APi Group

“These are foundational to being able to lead businesses,” Wooldridge explained. “When those bases are covered, leaders can innovate, change, adapt and lead more effectively.”

“This is important because we’re not building a big, monolithic organization,” said Wooldridge, “but we are all working in a team environment. We have to be fast-moving; able to seize opportunities; and address concerns, issues and challenges. This agility is the new stability.”

These three areas are implemented according to a 70-20-10 ratio that has emerged out of research on how leaders best develop. Ten percent is classroom education. Twenty percent is coaching and mentoring. Seventy percent is

the intentional involvement in developmental work assignments and experiences, where each individual collaborates with his or her leader to create an Individual Development Plan.

An Eye on the Future

It may have nine decades of experience under its belt, but API Group's longevity doesn't stop it from constantly innovating and seeking out ways to work smarter, better and faster in today's ever-evolving construction market. At the heart of its forward-looking strategy, for example, are three distinct think tanks established to help keep API Group ahead of the curve and on a continuous growth path.

Focused on field leadership, the first think tank looks at issues like: Where are our field leaders coming from? What kind of development do they need? How can we attract even more quality, skilled individuals to fill these roles? And, more generally, how do we train and develop our field workforce for a successful future?

A second talent magnet think tank is centered on employee recruitment, retention and engagement. "It's not only about getting more resumes into the pipeline," said Wooldridge, "but also about ensuring that API Group is a powerful talent magnet where people want to come to work every day. We realize that in this world, there's an all-out war for talent right now, and that we're not just competing against construction companies for this talent," said Wooldridge. "We're also competing against any company that wants good people—and we want those people to come work for us."

API Group's third think tank is focused on innovation and seeks out not just incremental improvements in the firm's current businesses—but also looks at what's going to happen to those companies in the future. "No business model goes to the sky, and no strategy goes on forever," Wooldridge stated. "We know that we can be disrupted or put out of business by threats that we can't even imagine right now."

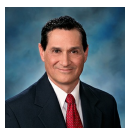
Through its innovation think tank, API Group has created a platform for teaching its leaders how to seek out innovation and how to create the experiments today that could possibly become the businesses of tomorrow. "We also encourage our leaders to think about how to innovate their business models and find opportunities that we've never considered before," said Wooldridge.

By taking this multifaceted approach to leadership development and innovation, API Group has been able to position itself as a leader in its own right. "By engaging and developing our leaders, and by using think tanks to help develop our next generation of leaders," said Wooldridge, "we feel confident in our ability to lead our company as a whole in the current environment and well into the future."

Taking the Lead

To other construction firms that are honing their own leadership development approaches, following API Group's lead by developing strong leaders who know how to lead not only others, but also themselves, is a good first step. From there, factor in the risks associated with your business and use them as a baseline for developing an effective leadership development strategy that takes those risks into account. And, as Wooldridge pointed out, remember that risk could be lurking around the corner on any job site or company location.

By ensuring that leaders are ready, willing and able to lead themselves first—and by taking the time necessary to train project managers and field leaders on the fine points of leading teams—your company will be better-equipped to respond to the changes taking place in the industry today ... and well into the future.



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