TALENT DEVELOPMENT
in the Construction Industry
2015 FMI Industry Survey
Executive Summary

Looking ahead, the construction industry must redefine the role of “human resources” to something much broader, where top human capital executives have a seat at the senior leadership table.
It has been a long and arduous stretch, but we can say now that the Great Recession is a thing of the past for the construction industry. However, it still resounds in the market and the minds of those who experienced it. Most of the people who were “downsized” or otherwise left the industry during the recession need to be replaced with people of equal or better skills. The results of the 2015 Talent Development Survey indicate that most companies in the industry are now struggling to fill those positions.

The millennial generation gets a lot of press these days too, and rightly so, because it is the next generation of any company that plans to stay in business and grow in the next decade and beyond. This year’s Talent Development Survey was conducted shortly after FMI’s millennial construction industry study, which gave the research team the opportunity to compare and contrast responses from both employers and employees. Findings indicate that employers might be missing the mark when it comes to employee retention and engagement in the construction workforce. Offering competitive pay is important – perhaps even a given in today’s tight labor market – but beyond that, employers need to start thinking about how they present opportunity in a strategic and compelling way to their workforces. For example, according to our research, only 19% of respondents define career paths for their employees – a human capital area that has been neglected far too long in the construction industry.

For companies looking to differentiate themselves, these circumstances offer great possibilities. Looking ahead, the construction industry must redefine the role of “human resources” to something much broader, where top human capital executives have a seat at the senior leadership table. There’s a need for greater accountability for profit and loss, for example, and for a deeper sense of planning and implementing strategies that put the right people with the right skills in the right jobs for years to come. More companies are moving in this direction, and we take a closer look at successful employee development efforts for two companies: The Sargent Corporation and i+iconUSA.

Finally, as the labor market continues to tighten, and as more and more of the nation’s 78 million-plus baby boomers head into retirement, construction firms will need to sharpen their hiring and recruiting pencils. Onboard, both millennial and Gen X employees will expect more than their older counterparts ever did, but in exchange they will bring to the table new skill sets and technological expertise that companies need to thrive and grow in today’s competitive marketplace. By building a sense of engagement and by putting an effort into corporate culture, for example, construction firms can help create positive environments where employees are willing to go above and beyond to help fuel organizational success.

Finally, this report presents recommendations for companies on how to get started with some key aspects of human capital management in construction.
Key Findings

Our top seven findings highlight employers’ key talent development challenges and the disconnects that exist between what employers are focusing on compared to what employees look for in a company.
This year’s Talent Development Survey was conducted shortly after FMI’s millennial construction industry study. This provided the research team the opportunity to compare and contrast responses from both employers and employees. Following are the top seven findings that highlight employers’ key talent development challenges and the disconnects that exist between what employers are focusing on compared to what employees look for in a company.

**Finding 1. Skilled labor shortages are intensifying and broadly affecting construction firms.**

From December 2007 to June 2009, the Great Recession resulted in more than 8.2 million job losses in the U.S. construction market. Construction put in place fell from a seasonally adjusted annual rate (SAAR) 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.

Five years later, the construction industry has rebounded modestly. Construction put in place has yet to eclipse $1 trillion (SAAR), but is improving steadily. Total construction employment has rebounded to just over 6 million workers, still a far cry from its peak of 8 million workers in 2006. Despite being more than 20% below its 2006 peak, the industry is struggling to find qualified labor. Could 2 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. This issue has caused challenges in the industry; according to our survey, 86% of respondents reported that their company was experiencing skilled labor shortages. Two years ago, only 53% of respondents said they were facing this challenge (Figure 1).

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**Figure 1. Skilled labor shortages have increased over the last two years.**

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>86%</td>
<td>11%</td>
</tr>
<tr>
<td>53%</td>
<td>36%</td>
</tr>
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Source: FMI 2015 Talent Development Survey
In five to seven years, I believe a contractor’s ability to grow will hinge on its ability to procure competent field supervision. The boomer retirement curve is going to be painful. It won’t be bonding, capital or the market – but contractors’ ability to provide qualified foremen and superintendents who can build work in a risk-averse environment.

—Mark Breslin, CEO of United Contractors

This situation isn’t a complete surprise, and many industry leaders have predicted labor shortages for years. However, the extent of labor shortages in the wake of the Great Recession is probably more severe than expected and is starting to impact construction firms nationwide. As one survey participant stated, “[Labor shortages] are affecting our ability to capitalize on the amount of business growth that is available.” (See Appendix for more of the open-ended responses from our survey).

Mark Breslin, CEO of United Contractors, echoed this sentiment: “In five to seven years, I believe a contractor’s ability to grow will hinge on its ability to procure competent field supervision. The boomer retirement curve is going to be painful. It won’t be bonding, capital or the market – but contractors’ ability to provide qualified foremen and superintendents who can build work in a risk-averse environment.”

Indeed, it is in this kind of environment where construction firms are at highest risk of going bust: By taking on too much work with not enough well-qualified labor, we see companies’ rework increasing while productivity and safety standards are declining,
which ultimately leads to reduced profits in an already competitive market. Progressive companies are investing heavily in building their project management capacity by innovating in areas such as prefabrication, technology, knowledge management, communications and professional development, among other things. In the coming years, clients will focus on construction firms that can bring top talent to the table (who are able to reduce risk and manage cost in an even tighter labor market).

**Finding 2. Employers might be missing the mark on employee engagement.**

Offering competitive pay (89%), providing an enjoyable work environment (81%) and offering training opportunities (76%) are the top-three methods that survey respondents use to retain key talent in the construction industry (Figure 2).

Conversely, when we asked millennials in the industry what was most important for keeping them engaged, they responded: 1) competitive pay (29%), 2) work-life balance (23%), and 3) personal development (16%). Interestingly, when we broke down the data to compare differences...
Key Findings

Figure 3. Millennials in construction rank competitive pay, work-life balance and personal development highest.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive Pay</td>
<td>29%</td>
</tr>
<tr>
<td>Work-life Balance</td>
<td>23%</td>
</tr>
<tr>
<td>Personal Development</td>
<td>16%</td>
</tr>
<tr>
<td>The Organization’s Culture</td>
<td>13%</td>
</tr>
<tr>
<td>Opportunity for Advancement</td>
<td>6%</td>
</tr>
<tr>
<td>Agreeable Work Environment</td>
<td>4%</td>
</tr>
<tr>
<td>The Organization’s Reputation</td>
<td>4%</td>
</tr>
<tr>
<td>The Organization’s Commitment to Social Responsibility</td>
<td>3%</td>
</tr>
<tr>
<td>Benefits</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: FMI 2015 Millennials Survey

for the various employee age groups [“young” millennials (18-25), “old” millennials (26-35) and non-millennials (35+)], we didn’t find any standouts or trends that would signify any big generational predilections (Figures 3 and 4).

These findings indicate that employers might be missing the mark when it comes to employee engagement in the construction workforce. Offering competitive pay is important – perhaps even a given in today’s tight labor market – but beyond that, employers need to start thinking about how they present opportunity in a strategic and compelling way to their workforces. Training is important and has its place, but if it’s not offered as part of a comprehensive career development program, then training is simply a way of paying attention to human “doings” rather than considering employees as human “beings.” According to FMI’s survey, only 19% of respondents define career paths for their employees – a human capital area that has been neglected far too long in the construction industry.
Work-life balance is also very important to younger workers in the construction industry and represents a crucial aspect of the overall work environment. By offering flexible schedules, extended time off (e.g., sabbaticals) and other initiatives that help employees avoid burnout and maintain a healthy work-life balance, construction firms are more likely to retain their employees long term compared to those firms that ignore this key issue. Currently, only 35% of survey respondents use flexible work schedules as a means to retain key talent (Figure 2).
Key Findings

Figure 5. The majority of construction employers do not have a formal process to develop high-potential employees.

Source: FMI 2015 Talent Development Survey

Figure 6. Engaging all generations in the workplace requires clear career advancement opportunities.

Source: FMI 2015 Millennials Survey

My company provides excellent career advancement opportunities.

The number of years beside the dot indicates how long the employee believes he or she will stay with the company.
Finding 3. Companies in the construction industry lack processes to develop and promote high-performing employees.

Strategies for attracting, engaging and retaining key talent vary broadly in the construction industry and differ in effectiveness from company to company. Especially in today’s tight labor market, building the best team can be a major competitive advantage for any organization. Surprisingly, the industry is slow to adapt to today’s changing workforce needs: Only 31% of survey respondents have a formal process for developing high-potential employees while the other 69% do not (Figure 5).

With young, ambitious millennials wanting to learn and move up quickly through an organization, employers must begin developing and implementing focused solutions around career pathing – for both high-potential and “regular” employees. In fact, the FMI millennials study confirmed what we have felt all along: If employees understand how they can advance and progress in their careers, then they are more likely to remain with their companies long term (Figure 6).

Finding 4. Executives and field managers are expected to have the highest attrition rates over the next five years.

According to our survey, respondents expect the highest attrition rates among executives (16%) and field managers (14%) over the next five years (Figure 8). Ironically, while 32% of survey respondents have succession plans in place for executives, only 5-6% have succession plans in place for field and project managers (Figure 9). This leaves a huge gap (and an opportunity) for companies to develop leadership programs and succession plans at the middle-management level, particularly for field supervision. Perhaps this is just one more indication that contractors have not taken seriously the shortage of skilled workers, especially the lack of qualified front-line supervisors. This will become more critical as the boomers retire at a greater pace over the next five to 10 years.

Finally, companies often devote resources to employees who aren’t well-suited for advancement. However, by identifying high-performing individuals, companies can be more deliberate about allocating resources to those individuals with the highest potential. According to our survey, those companies with well-structured plans for developing high-performing employees combine several key aspects of professional development, including structured coaching and mentoring, individualized professional development and career path planning (Figure 7).

Highly innovative companies are adopting internal employee benchmarking systems that link employee performance data to overall company performance. Providing these performance measures not only fosters healthy internal competition but also aligns employees with the strategic goals of the company. By coupling these strategies, companies can effectively improve the best employees and provide specialized training to allow continued employee advancement – a key ingredient for engaging millennials long term.
Ken Wilson, head of FMI’s Talent Development Group, stated, “I think that the lack of succession planning for project managers and field supervisors will become a very significant challenge for the industry in the very near future. Although we have been predicting this issue for many years, the industry got a reprieve during the recession and has not yet begun to focus energy and resources to address this problem.”

Progressive companies are focusing on fast-track leadership programs to advance less experienced field employees within a very short time frame. As one industry executive explained, “With the limited amount of skilled labor available, we took many of our company’s highly skilled craftsmen and turned them into supervisors to help manage less experienced workers. These skilled craftsmen went from being welders one month to foremen the next month. This doesn’t necessarily mean they’re good-quality supervisors; leadership and mentoring skills are very different from technical expertise.”

Figure 7. Most commonly used performance improvement methods by respondents who have a well-structured plan in place to develop high-performing employees.

Source: FMI 2015 Talent Development Survey
Intentional and individual development of a leadership candidate pool ensures that the necessary talent is available and at the highest level of preparedness when called upon. Just as the organization must develop a long-term vision, those individuals need to work toward a long-term development goal that yields a return on investment for leadership and responsibility preparation.
Figure 9. Most respondents focus on succession plans for executives.

Finding 5. The majority of firms don’t connect training expenditures and performance management metrics.

There is an old saying in the advertising world that “half of our advertising dollar is wasted; we just don’t know which half.” That saying can also be applied to training and employee development costs, as 53% of respondents noted they did not track return on investment for employee training (Figure 10). Although most everyone agrees training is important, measuring the training results effectiveness is elusive for many in the construction industry.

This is consistent with other industries, according to research conducted by McKinsey a few years ago. In its survey, the authors found that 90% of respondents said that building capabilities was a top-10 priority for their organizations. However, only 25% of the respondents said that their programs were effective at improving performance measurably, and only 8% tracked the program’s return on investment.

The same can be said for the construction industry, where firms appear to go through the motions of training but lack effective methods of measuring its true value. Since the Great Recession, training budgets for our survey respondents have almost doubled. And while these companies may feel like they’re giving their employees ample opportunities, most are paying less attention to these individuals as “human beings” and are more interested in their contribution as “human doings.”

To make training meaningful and a part of a broader employee engagement initiative, that training must be integrated into a comprehensive human capital program that strategically links skills, performance and training programs. As Wilson pointed out, “There is no doubt that the majority of construction firms are not connecting their training expenditures to any kind of performance management metrics. And thus, have no vehicle for measuring ROI on training. They just seem to want to check off the initiative from their list and convince themselves that they are making a commitment to their people.”

By more closely aligning training curricula with key performance metrics – and then measuring...
Finding 6. Annual performance reviews are a top priority for increasing employee performance and development.

To improve employee performance and development, 77% of respondents plan to conduct annual employee performance reviews (Figure 11) in the next year. In some ways, performance reviews can often be seen as conducted too late to impact a change in performance over the coming year. However, if consistently and fairly applied on a regular basis, such reviews can help keep employees on track and engaged in order to meet specific goals.

This is especially important for younger employees who want to know how they’re doing and where they’re moving in their careers. Almost 50% of our millennial survey participants responded that they wanted feedback on a monthly basis – a key indicator of how this young generation is driving change in performance management (Figure 12). This generation is used to speedier reactions and responses; annual reviews are no longer a viable
solution. Employers must shift their mindsets and start developing mechanisms for frequent communication and information exchange across all company levels and age groups.

Finally, the survey results highlight how employers and employees in construction don’t quite see eye to eye when it comes to performance and employee engagement. By focusing on annual performance evaluations and employee involvement in training and development opportunities, companies are neglecting the “human” or personalized aspect of engaging their people. This would include working with individuals to design well-thought-out career plans, defining expectations and mapping out milestones, and talking openly about shared objectives and goals. Employees who are engaged and who grasp their purposes in a broader company context are more likely to perform better versus those who don’t understand their places. Moreover, young employees, in particular, want a clear understanding of what opportunity looks like and are more than willing to go above and beyond if they feel like their needs are met.

Finding 7. Having a defined and well-communicated vision is critical to retaining key talent – regardless of age.

The construction industry faces unprecedented skilled labor shortages. In these tough times, employers are doing everything they can to attract and retain the best people possible. According to our survey, internships are the most frequently used method to recruit and retain new employees (Figure 13). This is a great way to have employees get to know a company’s culture first-hand and learn everything about the internal team dynamics at play. It’s also a great opportunity for leaders to educate new
I would say that most performance appraisal processes are just going through the motions. Once again, they do not include forward-projecting metrics and are a painful chore for most managers. The annual interchange between supervisors and their subordinates is superficial, at best, and probably does more harm than good in that it does not result in targeted individual development plans.

–FMI Talent Development Consultant

### Figure 13. Methods used to recruit the best talent from the millennial generation.

Which of the following is your company using to recruit the best talent from the millennial generation?

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internships/co-ops</td>
<td>71%</td>
</tr>
<tr>
<td>Job postings on your company’s website</td>
<td>68%</td>
</tr>
<tr>
<td>Online recruiting tools (e.g., Monster.com, Careerbuilder.com)</td>
<td>68%</td>
</tr>
<tr>
<td>Increase recruiting efforts at schools, colleges and/or universities</td>
<td>61%</td>
</tr>
<tr>
<td>Internal employee referral program with incentive</td>
<td>59%</td>
</tr>
<tr>
<td>Professional recruiters</td>
<td>48%</td>
</tr>
<tr>
<td>Your alumni employees recruiting at their alma maters</td>
<td>44%</td>
</tr>
<tr>
<td>Increase recruiting for experienced industry talent</td>
<td>43%</td>
</tr>
<tr>
<td>External referrals</td>
<td>40%</td>
</tr>
<tr>
<td>Recruit in nontraditional labor pools (women, minorities, veterans)</td>
<td>38%</td>
</tr>
<tr>
<td>“Poach” employees from other firms</td>
<td>35%</td>
</tr>
<tr>
<td>Association job boards</td>
<td>23%</td>
</tr>
<tr>
<td>Job postings in professional journals</td>
<td>22%</td>
</tr>
<tr>
<td>Other</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: FMI 2015 Talent Development Survey
employees around what the company stands for and why it exists. Having a defined and well-communicated vision is the first step in engaging employees long term – regardless of their age and background (Figure 14).

This is particularly important for millennials who want to do more than just punch a clock and take home a paycheck. They’re looking to add value, make an impact and find meaning in what they’re doing. Construction firms can leverage these realities by ensuring that younger workers have a clear sense of purpose and an understanding of their roles within the larger plan.
“You cannot build a dream on a foundation of sand.” – T.F. Hodge

Everyone in our industry already knows the critical importance of a good foundation to any project that’s under construction. Shortcut the foundation and everything else will be in jeopardy. The same is true of our people. Investment in those who are closest to the work pays dividends in the field.

The Sargent Corporation in Bangor, Maine, an excavation and site contractor, believes in investing in its field management personnel. During the summer the firm is busy serving its customers; but during the slow winter months, it gathers its 60 superintendents and foremen for an extended eight-day, leadership,
team-building and operations training program. Why is such an investment of time, energy and finances so critical to the company? Jason Frederick, Sargent’s safety and training coordinator, says, “We want projects to run more efficiently through better communication, clearer direction and good planning.”

Growing the skills of field staff will result in three huge benefits for construction firms. First, profits are made or lost in the field. Think about how much impact superintendents and foremen can have on the success or failure of any project. Change orders, equipment use, rework, safety and team effectiveness are all driven by decisions in the field. Better equipping these critical staffers can make a difference for years to come.

The CEO of Sargent Corporation, Herb Sargent, says it best, “The field level is where the rubber meets the road – from concept to reality. If we are going to spend money, we know the best bang for our buck is to enable the field staff to take their abilities to another level.”

A second reason to invest in the field is to create ownership at every level – a key component of employee efficiency, client interaction and team cooperation. When field staffers feel like they have input and the ability to direct overall work, quality also improves. Sargent Corporation is an employee-owned company, but ownership goes well beyond corporate organizational systems. Training helps to get everyone on the same page and helps everybody appreciate the views of others who have different perspectives on company issues.

Tim Folster, Sargent’s VP of operations, feels that the staff took ownership in its last training by dialing up its team approach, getting to know each other better and finding ways to improve its work together.

“There were two parts that seemed to impact our employees the most,” Folster says. “First, the personality sections really highlighted for them why they might be having issues with others and how to resolve some of the issues. Second, the activities showed them how important it is to plan upfront rather than just jump in and start doing. They also learned that asking the right questions is critical to understanding. The impact to the company has been both better job planning and better communication. They are talking things over now with the crews about how to approach things. They are asking and talking together about how we should do this and how we can improve our process.”

With its field staff training, Sargent also wanted to more effectively identify and resolve problem areas on jobs. After all, discovery happens best in the field. When those same workers are equipped to respond and mitigate issues immediately, everyone benefits. Crews are less stressed. Downtime and rework are minimized. In addition, most importantly, customers are more satisfied.

When asked if he thought the time spent on a recent training program with FMI was worth it, Herb Sargent simply said, “It was critical for our supers and foremen to get the same message, language and knowledge. It was a big operation, and many companies might sneer at the spending, but I think it will have many returns. You owe it to your customers and your people. So just do it!”

Investment in field employees can pay great dividends. Many companies focus on upper-level employees of their organizations, but without a solid foundation, a building will
In order to accomplish their strategic objectives, Michalski and Snyder realized they would need to enhance the skills and effectiveness of their management team at all levels. Specifically, they recognized a gap in employee development in the middle management ranks and a lack of succession planning for retiring senior managers. “We now have a heavy focus on employee development, and we recognize our need to transfer knowledge and experience throughout the organization,” says Ryan Surrena, senior project manager.

Knowing that it could not overcome this shortage overnight, i+iconUSA created a five-year development plan that would steadily upgrade the skills and capabilities of people across the entire firm. It began with its critical middle management group at Fay and then extended the process throughout the field operations team, eventually engaging project managers, superintendents, general superintendents and project engineers across all i+iconUSA companies. The company also included functional managers in order to create a cohesive culture and enhance performance across the company.
Objectives

i+iconUSA made the obvious commitment of providing training to enhance the leadership, management and business skills of its middle managers. This primary objective was to create a pool of capable managers who will ultimately lead the business and drive sustainable and profitable growth across the companies. The firm also gave these emerging leaders additional responsibilities that would help them stretch beyond their current roles.

Although the participants were all well established and had demonstrated their capabilities through their successful careers in managing various projects and functions, each would be required to take on new responsibilities and expand his or her skills to include a broader understanding of the complexities of construction company management.

Senior leadership willingly provided support throughout the process. These leaders contributed to the curriculum, launched and often participated in training sessions, and refined their skills as mentors and coaches to the program participants. They took a real interest in the careers of the participants and formed natural bonds.

Several members of the first leadership development program have now developed the confidence to tackle real-world problems and have implemented changes that have improved overall corporate performance. “I get a lot of support and can speak directly with our leadership team to get what we need. The LDP (Leadership Development Program) could not have come at a better time and has redefined me as a person and a leader,” says Tyson Hicks, project director.

Effective project management requires short-term attention to detail and the ability to react quickly to anticipate and solve problems in the field. By contrast, leading a business demands a global view of enterprise wide risk and a longer time horizon to plan for the strategic direction of the business. Rather than just shifting labor, equipment and materials to meet daily or weekly schedule needs, company leaders must analyze external market factors against mid-term and longer-term demand to project organizational resources across future business cycles. “Global financial understanding, why we bid what we bid, and how to choose jobs are the areas I need to continue to refine,” explains Clint Filges, operations director. “Being assigned to a task force to work on business plans is another way that I can improve my skills.”

The i+iconUSA and Fay leadership teams worked with the Talent Development Group at FMI Corporation to develop a draft curriculum designed to build skills in these three major areas:

- Management
- Leadership
- Business acumen

Working together, our joint team created a phased developmental structure that included these components:

- Individual and team assessment and interviews
- Curriculum design
- Customized development
- Program delivery
- Team project development
Reinforcement and implementation
Feedback and improvement

After compiling the feedback for each LDP member, the joint team designed a curriculum to address a broad range of skills, including:

- Management and leadership
- Financial management and cash flow
- Presentation skills
- Client relations and business development
- Strategic thinking and problem-solving
- Negotiating skills and conflict resolution
- Ethics and integrity
- Feedback and team motivation
- Emotional intelligence
- Risk management
- FMI Construction Profitability

The resulting curriculum was then translated into a series of seven, two-day training modules, scheduled every 60-90 days over a period of about one year. Each session included basic skills development and was customized to incorporate the company’s specific processes and procedures to facilitate the transition from the classroom to apply these new skills while addressing practical challenges when they got back on the job.

Mike Trettel, business development director, describes the benefits to his evolving career: “As we began the LDP process, I had just started in the role of business development, so learning the new role along with the new skills has been a great opportunity. Improving both hard-edged and soft skills has helped me as I work with our executive team. I’m learning to lead without being in charge by effectively leading resources that don’t report to me directly.”

After the classroom training, the participants were asked to take on a group assignment to identify real-world opportunities for organizational process improvements. This self-managed team identified a need to challenge how projects were managed on a day-to-day basis across the company. Utilizing their new skills of collaboration and team problem-solving, the group identified inefficiencies and internal obstacles and thus developed new processes to manage projects more effectively and efficiently across Fay. Brian Carr, project director, described his own experience: “I have gained new opportunities to implement the company business plan and drive our strategy for more work with private sector clients. The challenge for me personally is to learn to lead as well as to manage depending on a particular situation.”

**Phase Two: Expanding the Culture**

After the initial group of participants had been implementing their new skills for about a year and built a solid foundation of success in the process, i+iconUSA decided it was time to expand the process and train a much larger group and thus extend the commitment to future growth further into the organization.

We gathered the alumni of Phase One and members of senior leadership together to solicit their input for designing a modified curriculum for this next larger group. This group includes about 40 superintendents, general superintendents, foremen, project managers, project engineers, safety coordinators, and IT and finance personnel from all i+iconUSA companies and is divided into two groups of 20...
each. Based on input from the experience of the alumni group, they prioritized course materials to create a series of six one-day modules. Each one-day module would be delivered for the two groups on two consecutive days every 30-60 days, with a break during the busy summer construction months.

This series would also include FMI’s two-day Construction Profitability business simulation for each group to facilitate the practical application of the skills and make the transition from the classroom to field implementation. This process was also accelerated by the hands-on participation of the alumni group, which sat in on the classroom sessions and offered insights into how the skills can be applied in the field. Alumni also provided guidance as each module was developed to make sure that a consistent message was being communicated to this broad group of program participants.

In addition, feedback is collected through a customized online survey immediately after the delivery of each training module. This feedback is analyzed to make changes to future modules to accommodate participants’ needs. The education from each module is also reinforced through a series of tailored one-page reminders that are sent to all participants between sessions to create a link from the classroom to the real world of field operations.

**Outcomes and Benefits**

Besides the inherent benefits of training for a broad group of people across the organization, there are intangible benefits of bringing people together across various companies and locations. Some of the participants don’t encounter each other during their normal workflow, so this platform results in a more cohesive and collaborative culture as well as a vehicle for sharing best practices across the various operating divisions. Although they deliver different kinds of contracted services, there is the common thread of heavy civil construction. This helps to create a synergy for problem-solving and leveraging operational excellence.

This facilitated interaction has created a pipeline to support future growth in both geographic and targeted market sectors. Ryan Surrena describes his relocation from Maryland to Pittsburgh as the biggest opportunity: “Through my involvement in the leadership development program, I was able to see past the actual construction of the projects and start to see the big picture and how the company is truly evolving. Relocating back to the Pittsburgh area was not only ideal for my family, but it also provided me the opportunity to use the skills that I learned to lead and manage much larger projects.”

It will take a while for i+iconUSA to reap the long-term benefits of its investment, but individuals like Hicks are already seeing a difference. “We have always treated employees well, but over the past few years, the company has become more attractive, and more people desire to join us based on the perception in the market of how well people are treated and the time and effort placed on employee development and growth,” he says. This culture will help i+iconUSA achieve its objectives of becoming a best-of-class employer of the future.
Business Implications

It’s time to eradicate the archaic management models that are so frequently used in the construction industry and implement performance management processes that factor in ongoing training, coaching, development and associated performance metrics.
As the labor market continues to tighten, and as more and more of the nation’s 78 million-plus baby boomers head into retirement, construction and engineering firms will need to sharpen their hiring and recruiting pencils. Onboard, both millennial and Gen X employees will expect more than their older counterparts ever did, but in exchange they will bring to the table new skill sets and technological expertise that companies need to thrive and grow in today’s competitive marketplace. By building a sense of engagement and by putting an effort into corporate culture, for example, construction firms can help create positive environments where employees are willing to go above and beyond to help fuel organizational success. Here are five ways to start doing this today:

1. **Develop a company vision that encourages a culture of engagement.**

This initiative should start at the top of the organization, where leaders must work to continuously build a sense of engagement across all levels of the organization. Simply putting a plan in place and hoping that it sustains itself for the long run is not enough. Having a clear vision in place and communicating that vision on a regular basis are the first steps in creating a culture of engagement. Diagnostic models, culture surveys and other tools can be insightful for reviewing progress and making the necessary adjustments. This will help avoid stagnancy and ensure that the program remains relevant for the current and future workforce.

2. **Build your project management and field supervision capacity.**

The retiring baby boomers will leave a major void in their wake, where field and project managers – already in short supply – remain at risk of being burned out due to companies running lean since the Great Recession. And while doing more with fewer people may seem to be a good financial move in the short run, it creates a huge stress on project managers and superintendents. This will ultimately result in people leaving to find a more conducive environment to support their personal goals and balanced lifestyle. The cost of replacing these resources will far outweigh any short-term savings and may even inflict irreparable harm on the culture of the organization. To offset this challenge, companies must develop fast-track leadership programs to move people up into field management and supervisory roles and develop long-term career and succession plans for existing field supervisors.

In addition, FMI recommends searching outside the industry for people who have solid business leadership and finance experience. “We need ‘project CEOs’ – individuals who possess the business acumen to run a substantial portion of work, manage and lead a workforce in such a way that they can achieve their maximum potential – no matter the size and scope,” explained FMI consultant Dustin Bass. That said, these types of employees will need team members with construction expertise to provide a strong network to support their efforts in leading successful projects.

3. **Reinvent your human resources business.**

No longer just a “back-office” function or a “necessary evil,” the HR department has taken center stage in today’s labor-strapped business environment, where three (and soon to be four) generations of workers rely on these departments for early and ongoing support.
According to recent research on human capital trends, just 5% of companies rate HR performance as “excellent,” with business leaders rating HR’s performance 20% lower than did HR leaders. Unfortunately, the construction industry has neglected HR for years and treated the function as an administrative concern versus a strategic one. Today, HR needs to be redesigned and factored into the broader context of business success as human capital becomes a top strategic priority for today’s firms.

4. Create and implement an effective performance management process.

It’s time to eradicate the archaic management models that are so frequently used in the construction industry and implement performance management processes that factor in ongoing training, coaching, development and associated performance metrics. The transition may not be an easy one since many firms don’t have the necessary systems or processes in place to transform their current performance management models. According to Gallup research, however, effective performance processes correlate directly to sustainable company growth. Leaders must leverage this advantage with merit-based systems (to discern among different levels of “performers”) by defining expectations and standards for the team and individuals, and talking openly about how shared objectives and goals will increase the benefits and rewards for all team members.

5. Transform learning and development.

Finally, companies must carefully assess their current learning and development processes, find the gaps that exist within them, and then fill those gaps with new learning and support structures. The skills gap is real: In a global study covering a broad range of industries, researchers found that just 28% of firms think they’re “ready” or “very ready” when it comes to workforce capability. The problem is that many companies go through the motions and offer training as a means to keep people up to speed on skills. Such training is commonly offered within a void and isn’t tied to a comprehensive career pathing program or long-term performance goals. To overcome these obstacles, companies must develop formal learning and engagement plans that leverage new technologies, methodologies and outcomes.

3 Ibid.
What’s Next?

From hire to retire, employees should be aligned with the organization’s overall strategic goals, and leaders need to make these goals a reality.
As organizations scramble to keep pace with today's evolving business environment, company leaders worldwide are taking a more careful and calculated approach to finding and retaining “human capital.” The economic recovery, the changing workforce, skill scarcity and higher worker expectations – not to mention the fact that millennials (born 1980 to 2000) are surpassing the baby boomer generation in size – are all placing increased pressure on companies across many different industries.

To offset these and other challenges, today's construction and engineering firms are seeking out new ways to attract, develop and retain top talent, but according to our survey results, they still have a long way to go in this area. Despite companies almost doubling their training budgets over the past few years, it seems that many of these efforts aren't linked to strategic business goals or comprehensive workforce management plans that intentionally tie together skills, performance and training programs.

As Wilson pointed out, “Although many construction firms are making significant investments in developing their people, they seem to be missing an opportunity to connect their training objectives to any kind of performance metrics. Now is the time to engage your human capital team to build integrated development solutions that will drive a company's long-term strategic objectives.” For companies looking to differentiate themselves in this environment, the opportunities are plentiful.

Looking ahead, the construction industry must redefine the role of “human resources” to a much broader approach that gives top human capital executives a seat at the senior leadership table. This will require new tools, metrics and analytical capabilities in order to translate qualitative workforce information into the quantitative language of growth and profitability.

Tomorrow's human capital leaders will find ways to combine the strategies, practices, and processes needed to overcome obstacles and create a sustainable competitive edge for their organizations. From hire to retire, employees should be aligned with the organization's overall strategic goals, and leaders need to make these goals a reality. Developing and engaging employees – as well as managing their performance – are critical steps, especially for millennials who want to do more than just punch a clock and take home a paycheck. These individuals are looking to add value, make an impact and find meaning in what they're doing. Construction firms can leverage these realities by ensuring that younger workers have a clear sense of purpose and an understanding of their roles within the larger plan.

Of course, it's not just about attracting millennials to the industry, nor is it about offering higher pay packages and better benefits. To most effectively position themselves for success in the coming years, organizations need to think about the cross-generational benefits that come from developing and cultivating a diverse workforce. To create a win-win situation both for the company itself and for its employees, customers and business partners, firms must think beyond the “our employees are our greatest asset” mentality and understand that “our company is our employees.”
How are skilled labor shortages impacting your business?

- Affecting our ability to capitalize on the amount of business growth that is available.
- Affecting our ability to man jobs; this hurts the project schedule. Lower-skilled newcomers have to learn safety and are less productive.
- An increase in poor hiring.
- At some point, it will limit our growth or produce projects with problems.
- Businesses are beginning to turn down work.
- Cannot do the revenue available because of the shortage.
- Cannot grow as fast as we would like. We need very specific industrial experience.
- Can’t find legal workers who can fill out an I-9. Lack of immigration reform is killing us. Most competitors misclassify workers, and a cheap price gets the work.
- Carpenter and laborer unions are not training enough workers to keep up with the rebounding economy and the ramping up of construction funding.

- Cement finishing, in particular, is a craft that is stretched in our market. This shortage prevented us from pursuing additional work that required significant self-performed concrete.
- Competition for craft with mega projects, e.g., Tesla plant in Reno, consuming much of the skilled workforce in that region.
- Creating stress in the systems. Delaying project progress.
- Currently it isn’t, but it will in the foreseeable future. Mostly sub-related.
- Demands additional investment dollars into employer-sponsored training (outside of apprentice training centers, etc.).
- Prolongs/delays the retirement of key executives, as succession development is an extended time frame.
- Increases labor burdens to address negotiation needs with labor unions.
- Difficult to staff client projects adequately. This can result in turning away work or not bidding work as competitively as we would if we had ample staff to service client project workload. Please note that we do not employ craft or trade workers directly.
- Difficult to find skilled craftspeople. Subcontractors face revolving door as craftspeople move from one contractor to another for $1/hr. increase.
- Driving wages up; leading us to focus more on internal talent development, training, etc.
- Extreme shortages of foreman-level skills are damaging productivity. No amount of pay seems to be able to find the skill sets lost in the last seven years.
- First-line supervisors spend much of their time training, reducing the supervisor-to-craft ratio.
- For self-performed work, productivity rates are declining. For subcontracted work, quality of workmanship is lower, and it is much harder to meet schedules.
- Having to supplement areas that we would typically self-perform with subcontractors.
- In certain markets, we have pulled back on sales. We are a labor management business, and labor productivity makes or breaks us.
Increased turnover – higher than normal. Additional training required to upgrade labor skills. Higher wages than projected in bid proposals.

It is not a constant impact. Simply put, when workloads are high in particular regions, the overall supply is limited for the top craftsmen.

Lack of knowledgeable sales representatives (retiring) – Lack of skilled service technicians entering the workforce.

Limits the amount of work we can pursue and impacts our labor performance.

More difficult to find subcontractors that have the qualified staff to perform the work.

Not as drastically as others. We were able to keep most of our key employees during the recession.

Our region is still recovering, and even though we are not experiencing shortages at this time, we expect impacts within the next year or two. We expect production decline, injury increase and wage wars.

Pressure for tenured workers to delay retirement, which impacts morale and creates challenges in job redesign to accommodate physical and mental changes.

Quality issues; redoing work; takes more time to put work in place.

Restriction on decision-making with regard to pursuing opportunities, quality concerns, safety concerns.

Shortages in skilled labor forces result in the inability of specialty subcontractors to keep pace with schedules, and it results in quality of work that is inferior to the quality achieved in the past.

Since the unions are not able to provide us with qualified candidates, we are conducting our own open houses to interview candidates and refer them to unions for apprenticeships.

Spending more time and training dollars on new employees.

Takes a long time to train new employees, and they aren’t coming in with some of the minimal skills needed, especially math skills. New employees aren’t as dependable as long-term employees. Reduced production and reduced quality by new employees, and experienced employees are spending more time training, thus reducing their production.

The biggest impact is turnover. As a rule, our experience in the past has been that our turnover rate has been low when compared to our competition. We have branched out to new geographic areas where our niche expertise required a specific skill set from our trade partners. The fact that the niche we work in hasn’t hit the geographic area to date, and getting skilled labor that understands the ins and outs of our niche is an issue. We hire and do our best to get craft that is open-minded and wants to work in our niche. There are craft from 34 different local unions manning the project, and that is due to the fact that the local union can’t provide workers skilled in our niche. Thus, we have to get folks from areas that are familiar with the niche skill set and can be more productive than those who have to learn it from the ground up.

Today’s worker wants to make the most, do the least, have zero responsibility.
We are having great difficulty finding skilled labor. Most of the applicants that we get are very young and have no experience or are getting older and do not want to travel. We are facing a critical need for skilled tradespeople but are not able to find them, which greatly affects our ability to perform work. Recruiting is becoming much more competitive.

We are in the people business but happen to be a national electrical contractor. So the reliance on skilled labor talent is crucial to the success of our company. Being able to appropriately staff a particular project is a determining factor in the commitment to the job.

We are unable to fill positions for heavy equipment mechanic and low-bed driver. We are hiring subcontractors to perform equipment repairs and mobilization of heavy equipment to make up for our labor shortage. We planned to add an additional low bed to our fleet to support work in our expanded geographic work area and put that on hold due to shortage of skilled drivers. We are spending more time and resources than in the past to provide training to our staff to grow and maintain our skilled workforce in-house.

We completed a year with a terrible safety record due to injuries on the jobs.

We don’t have a shortage of “skilled” workers yet, but we are seeing a shortage of highly productive workers. In other words, the skilled workers we bring in to help in busy times are not as productive as in the past.

We have to think about the amount of work we can bid in order to be sure we have the skilled workforce to perform the work. Recruiting has become a major factor in our hiring process these days. We are having to think outside the box on what extra measures we are taking and will have to take in order to properly train, engage and retain our employees.

We need certified HVAC techs.

Welder quality slows scheduled progress on schedule-driven projects. Cost escalation due to increasing hours and sub pay to attract workers.

We’re a highly specialized, 100% federal contractor. We always struggle with finding qualified female, minority and/or veteran candidates.
Appendix: Selected Responses

What is the single most successful thing your company does to promote talent development and retention? (Please elaborate.)

- Aggressive career development program. Keeping people challenged and growing really keeps most folks happy.
- We are developing an internal company university program for field foremen through project managers.
- Build a culture of integrity, trust, transparency and appropriate reward; train our employees; and have a competitive, collaborative team where top management works smart and as hard if not harder than other level employees.
- Care about the employee.
- Communicate our culture. Require training on personal development and discernment of purpose. Offer true ownership to proven performers. Have a concrete succession plan and communicate it throughout the organization.
- Competitive salaries and reputation.
- Conduct talent reviews. Conduct succession planning. Identify development planning based on talent needs.
- Continued effort to improve an employee’s skills through our training program.
- Create a culture of success.
- Cross-training.
- Develop thorough training programs in-house and provide knowledgeable, credible trainers to teach curriculum.
- Developed an in-house educational program for office and field, management and support staff.
- Developing a strong, attractive company culture where the value of the person is an integral part of it.
- Developing career paths and showing what is possible in the future.
- Don’t have an issue retaining people in office positions. Field positions have not had a successful program yet.
- Employee ownership/company culture (employee empowerment).
- Enable an environment of opportunity, empowerment and authority to shape one’s own career path.
- Engage people and take care of them. Above-average pay and benefits and company trips for employees and spouse.
- Excellent wage package with top-notch benefits.
- Formal training aligned with internal career paths to develop required skills for internal promotions.
- Good relationship with local schools and our trade union.
- Implement a robust onboarding process and mentoring program.
- In the field, we look for people we believe have the basic skills and desire to move up. We discuss these qualities with them and work with them to gain additional skills as well as discuss opportunities that may arise and help steer them toward those opportunities. In the office, we do a lot of cross-training, which helps us recognize useful traits desirable for management staff and work with those people to develop additional skills for anticipated upcoming openings and promotions. We begin this process very early in an employee’s career with the company.
- Individual coaching and mentoring to identify individual development.
Informal mentoring — although it may not be that successful. We rely on our positive work culture and competitive pay.

Live a culture of appreciation. Great contractors glorify the field. That appreciation includes paying competitive salaries and benefits. Opportunities for advancement and internal promotions. Structured feedback and training opportunities. Structured onboarding. Structured mentoring.

Offer competitive pay and benefits and meaningful goals so that they can gain a sense of accomplishment.

Offer in-house skills training/apprenticeship and skills-based pay incentives.

Offering increased project responsibility and pay.

Offering school reimbursement programs, and professional training seminars are offered.

Our people are our best recruitment tool. The people that work here love it, and they tell others, which makes everyone they talk to want to be here. Therefore, our employee referral program is very popular.

Project-by-project incentive payments, benefits, workplace satisfaction.

Provide a culture of growth opportunities with an emphasis on internal promotions as positions open.

Quality reputation.

Regular appraisals are important to employees. This enables them to understand their value to the company.

Set a goal requiring that employees complete 30 hours of continuous learning each year. We create a culture where employees are expected to grow in their roles and the organization. We promote a family-friendly culture that seeks to satisfy an employee’s professional and personal needs.

Teamwork environment for employees working on projects. Each helping the other to succeed and complete projects in a timely and productive manner.

The single most successful thing we are doing is focusing on the development of our leaders and managers to be more effective. We are also focusing on developing our people to reach their full potential.

We are a small company that tries to treat everyone “like family.” We have only been in business for 10 years but have not suffered much turnover except in our labor force. Laborers are the hardest position for us to keep. For a laborer, we try to pay competitively in our area, and that’s about all we can offer to keep them.

We do not do enough formally, but informally we have developed individuals who have moved up into positions that are more responsible. Retention is helped by strong company culture and competitive pay and benefits.

We have a plan in place to bring project engineers up through the ranks.

We have our annual “We Care” employee survey. It is 100% confidential. We take that information and form work plans around key themes that will make a difference going forward. We share those areas of focus with all employees.

We provide a work environment with a very intimate level of communication between the employees and management. We are a small firm, and the senior level management works closely with all employees, which
provides for an environment in which employees enjoy working. Internal, hands-on training occurs on a daily basis.

What is your company doing to attract people to the construction industry?

- Actively involved in NECA student chapters, ACE Mentoring Program, local industry association recruiting efforts; we also provide multiple internships each year.
- Advertising, word of mouth, networking.
- Apprenticeships. Interns.
- Assist with career events with high schools students, provide job-site tours, support scholarships.
- Attending university events and career fairs. Advertising job openings on diverse job boards.
- Build a fit company that executes the plan to success and have a company that has a culture to attract the diverse workforce, empowered with clear direction, accountability, competitive compensation with appropriate rewards. A company that “looks good from the outside” and truly is fit on the inside; a winning company that maximizes the performance of teamwork, innovation and success.
- Contributing to AGC and CCA efforts primarily. Hiring from degree programs, trade schools and veterans whenever possible. Participating with schools to employ interns.
- Develop networking relationships with colleges. High school presentations to encourage young people to consider the construction industry as a career. Provide attractive pay, benefits and policies.
- Enticing the employees with the fact that we are a firm that performs negotiated work, which provides for positive working relationships with our clients. In this day and age, the employees want to work in a positive environment, which this direction provides more so than hard-bid work.
- Focus on people, not position.
- Getting involved in local community activities.
- Going into high schools and teaching. Providing summer internships for interested high schoolers.
- Hiring farmers and teaching them how to build things with their skills and work ethic.
Marketing the industry not just our company. High school and junior high level.

Networking, job fairs at military bases, career fairs, working with CEFA, looking at re-entry programs, community service, internships, being known in the community.

Outreach activities with the local Builders Exchange, partner with local university and its STEM activities directed at middle school and high school students and their families, active university presence as guest speakers, hosting student chapter meetings and job shadowing days, participating in mock interviewing events.

Seeking avenues to meet and increase veterans’ employment; working with immigration attorneys for them to send us eligible workers; getting ready to go through churches and get into high school classrooms.

We participate in several middle and high school programs. Financial support to specific trade and college organizations.

Spending a lot of time with college and university construction and engineering programs in our state. A strong intern program.

That’s our struggle now that we are growing. The best thing we’ve done is start an employee referral program.

We are strong supporters of the ACE Mentor Program, including sponsoring chapters in several locations where we operate.

We are union and basically pull our labor force from that pool. Opportunity to stay with company at a competitive pay scale with fringes.

We are very active in local and national industry organizations and participate in mentorship and internship programs.

We have increased our outreach efforts with outside organizations and schools to help promote and introduce people to our industry.

We participate in the following organizations to help attract people to our industry:
- ACE Mentor Program
- Women in the Trades
- Urban League
- Junior Achievement

We also have a presence in local high schools where we speak about construction.

We serve on the board of directors of our training center, we promote employee community outreach, and we encourage employees to refer friends and family members as positions open.

We started a program at the local high school in which students have the opportunity to learn about the electrical trade, and we provide internship opportunities for those students who are interested. We also attend job fairs and do community outreach to introduce the industry.

Working diligently to create a company culture that will attract and retain people and develop a reputation as a “best place to work.”
The FMI 2015 Talent Development Survey was conducted online from mid-April through end of May 2015. During that time, FMI collected online responses from a total of 198 individuals, including HR directors, chief operating officers, chief executives as well as other decision-makers, all of whom work in various segments of the construction industry nationwide.

The majority of survey respondents represent firms with annual revenues of $100 million to $500 million (33%) or $50 million to $100 million (23%). Over half of all survey respondents were HR directors (31%) and CEOs (30%), with others comprising such roles as CFOs, COOs, owners or training directors.
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About FMI

Founded in 1953 by Dr. Emol A. Fails, FMI is the leading management consulting, investment banking† and people development firm dedicated exclusively to the engineering and construction industry. FMI professionals serve all sectors of the industry and combine more than 60-plus years of industry context and leading insights to achieve transformational outcomes for our clients. We have subject matter experts in the following practice areas and serve clients throughout the U.S., Canada and internationally:

Management Consulting
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- Market Research
- Business Development
- Operations and Project Execution
- Risk Management
- Compensation
- Peer Groups
- Performance Management

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- Ownership Transfer Planning

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- Organizational Leadership Development
- Leadership Training
- Executive Coaching
- Succession Planning
- Training and Talent Development

† Investment banking services provided by FMI Capital Advisors, Inc., a registered broker-dealer and wholly owned subsidiary of FMI.

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