

jointly prepared and distributed many articles in the past few years, and most of them focus on the shifting market and the demands that this places on business leaders. In addition to focusing on the business models and the business processes, we have to remain intently focused on the fact that our people have been and will continue to be the most critical component of our business success. It's our people who serve our customers, keep our promises, and follow the processes that ensure our profitability and future existence. Recruiting is what we do to ensure that the people we have on deck for tomorrow continue to excel and bring our business new success. Recruiting is much more than running a few ads and filtering through the candidates; recruiting is the entire process of motivating people to want to be a part of your team. Effective recruiting is effective motivation, so it never ends.

CA, Inc, and IEC have

Every day, we witness the next steps in Industrialization of Construction® and the increased demand for Agile Construction® business models and processes. As we have determined, our past success doesn't guarantee future success unless our business practices evolve; we also know that the skill and talent of our people must also evolve to maintain future success. For decades, electrical construction has relied only upon the skill and experience of the individual electricians. The company with the best electricians was the company that could realize the greatest success. However, electricians are not as readily available as they once were, and contractors are making changes to perform more productively with lower levels of individual skill.

Leaner and more Agile thinking contractors sought ways to develop business models and business systems that do not require as many skilled workers. Today, we are seeing rapid increases in prefabrication, preassembly, and vendor-provided service offerings to help offset the shrinking availability of skilled electricians. The common element in this change is standardized work.

Standardized work is not new. You can read about these concepts in the work of Frederick Taylor and many others. The introduction of standardized work in electrical construction is both enabled and mandated by Agile Construction®.

The worker in a standardized environment is not the same as in a technical specialty. The standardized work doesn't require nor inherently attract the artistic and creative personality of a skilled technician. To attract this new type of worker, in the quantities needed to support the current and future growth of the industry, means looking for different people in unfamiliar places. The creative thinker doesn't want a structured program and doesn't gravitate towards the discipline of predictable standardized work. In fact, this worker may tend to reject the whole idea. The personality of the worker who follows standardized process, procedures, and work instructions is far more common than the technical expert.

Recruiting this type of worker is not difficult; it is just different. We need to attract people to the industry; people who know little or nothing about it.

Historically, electricians would encourage others, attracting them to the industry. If the current worker doesn't match the future needs, they are less likely to encourage and attract others. Business leaders who are looking to hire the right talent need to own that responsibility. Strong recruiting skills is what sets out many leaders ahead of their peers.

The future worker will have access to information that the previous generations did not. What would have once only been learned through years, or decades, of experience can now be accessed in minutes through modern technology. The means and methods of construction and assembly that once required years of practice to perfect at a high-quality can in many cases be replicated with only hours or even minutes of training. Using new tools and materials, levels of system productivity available to today's work force are far beyond what could be achieved by the most experienced and talented individuals a few years ago.

The future worker isn't just an educated electrician; in fact education requirements for a worker in a standardized

WHAT TO KNOW BEFORE YOU START RECRUITING THE FUTURE ELECTRICIAN

1. What does your current and future business model look like?

- a. What type of work am I good at, and what do I expect to see in my market?
- b. What is the role of the electrician?
- c. Who is responsible for system design and layout?
- d. Who is responsible for code compliance?
- e. Who will do the material ordering and purchasing?

2. What skills are required to perform these functions?

- a. Do I need talented electricians who can think on their feet and design on the spot?
- b. Do I need assemblers in the shop and installers in the field?
- c. Will I be able to utilize my vendors to manage material ordering and logistics?

FEATURE

environment are lower. It's about the right education. The worker with the right education is the worker who has learned to communicate effectively in a team environment. The right worker for the future knows what needs to be done, knows how to do it, and works collaboratively with his peers to continuously improve the business system.

The training provided by apprenticeship and new hire programs provide a broad base of practical knowledge in design and installation, but may not be comprehensive enough to cover the changing aspects of the industry. As some

tasks become more standardized, some workers will take on greater roles. Other tasks will evolve, some which didn't exist a few years ago. Training programs that account for the diverse workforce, the technical advancements in the market, and the process changes required of project management will become more vital in the preparation of this next generation.

THE NEW ELECTRICIAN

Now we know we need a different worker than we have relied on in the past. We need workers with different talents and different personalities to excel. For the most part, the right people don't know what we do, and they don't know that we need them. The right people are inundated daily with new technology, games, gadgets, and widgets. These people are being taught about and exposed daily to the user interface of technology, but aren't shown the infrastructure behind powering this technology. The same person that is excited and enthusiastic about working with circuit boards switching milliamps of current could easily become excited about switching circuits that handle megawatts of current.

Recruiting the future electrician means marketing the industry; not the old construction industry, but the future electrical construction industry. An industry that is built on teamwork, safe and predictable work hours, more work done in clean and comfortable environments, and still one of the best pay scales available to young, trade-oriented workers. The future worker isn't seeking us, we need to recruit them. If we start the cycle, the right workers will migrate to the industry; but the first step is on the shoulders of the employers, not the associations, education, or marketing firms. The responsibility is on the employer to seek appropriate candidates and deliver on the promise of great training, a great environment, and an opportunity to succeed from the beginning.

Great training (Figure 1) is the first area that will impact the long-term effectiveness of our recruiting efforts. Our cost rises with turnover; resulting from dissatisfied workers who don't understand the work-and haven't been adequately trained to do the work. Remember, we are talking about a different kind of work than the industry is used to, and this requires training on Agile Construction® techniques and principles that are not intuitive or natural. The principle based model must be designed, built, and managed. The future workers in our industry are not satisfied with being told what to do and shown how, they need to know how things come together and how their effort supports the team and supports the system. They will see value in their contribution

DOES YOUR TRAINING PLAN INCLUDE THE RIGHT MIX OF TECHNICAL SKILLS AND OPERATIONAL PROFICIENCY?

1. Does everyone need the same knowledge and skills?

- a. What tools will my installers in the field need to use safely and effectively?
 - i. Will we be bending large conduit in the field?
 - ii. Will my electricians be threading pipe in the field?
 - iii. How much unistrut cutting and bracket fabrication will be done at the point of installation?
 - iv. How will gear and panels come to the job site?
 - v. Will my Field leaders need to manage production operations such as a high-volume of fixture assembly and whipping?
- b. What tools and skills will my shop staff require?
 - i. What are the basic or standard operations that we will perform in the shop?
 - ii. Who will do the system design and quality verifications?
 - iii. Will my Shop staff be expected to manage material, or will my vendors do that?

2. What does everyone need to know about the complete business system?

- a. Will I ask my people to simply do as they are asked and trust management to make things work?
- b. Will I expect my people to know about system productivity and Agile Construction® topics, so they can track and manage their functions to achieve optimized system performance, as opposed to sub-optimized individual performance?
- c. Who will be responsible for overall quality and continuous improvement?

above their own output only if they are trained to understand the overall system function and performance. This training is a key element in the recruitment process and is the fundamental basis for our retention process.

The future workers, the young people of today, haven't been raised in an environment that encourages long apprenticeships and years of sacrifice. They have been raised in the world that focuses on immediate success and access to more than their parents had. They don't want to wait, but they also don't hold back their productivity and your profitability if your business model is Agile and structured to encourage, reward, and benefit from standardized work in a safe, clean, and controlled environment.

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FIG 1. New Electrician training program focused on system level planning and Agile Construction®

THE SEARCH FOR FUTURE TALENT. WHERE DO WE LOOK?

1. Start Early

- · Help introduce middle school and high school students to the industry, let them know that high tech starts with the basic infrastructure.
- · Become involved with student groups and organizations that promote business knowledge and coop experience.

2. Focus on the career oriented

- · Trade schools and other technical training programs offer a source of people with interest in a career, but many are still formulating their goals.
- · Students often think they want to program computers, become business executives and engineers, or health care workers only to find that they are more interested in working with their hands or building things.
- · Often, these career-oriented individuals have an educational base for system thinking that is beneficial to the industry.

3. Watch online job seekers for people that interest you

- · Unemployment is low, but employees are changing jobs all the time. Even good employees change to work for a better leader in a company better aligned with their career interests.
- · Online job boards and search sites continue to increase as the leading source of employment leads. Don't miss out on these channels to talented people.
- · Don't expect that the right people will find you on your website. You need to actively seek the skills and talents that you are after, and search tools and filters can allow you to quickly identify potential candidates in your area.

4. Don't overlook the employees that you have

- · Many younger people have a strong desire to work with their friends and stay together on the teams that they have formed early.
- Your current employees and staff that know the future direction of the company and are excited to be a part of it will also be excited to bring their friends and family to join you.
- · Be sure that you are identifying the employees that are a good match for the future of your business, not the past.

5. Invest in open education

· MCA offers ongoing workshops and seminars relating to the future skills for this industry. Join us at one of our scheduled programs or even consider sponsoring such an event in your area.