Professional Construction Estimators Association of America, Inc. (PCEA) was chartered in 1956 with 35 members from various construction disciplines in Charlotte, North Carolina. Some of the Charter members remain active today. During our early years, members rallied together to exchange ideas, promote educational endeavors and high ethical standards, while simultaneously developing new friendships. Under the leadership of Charlotte’s early presidents, the members set forth many goals to promote and support the industry while expanding the voluntary association. As a result of these efforts, a second chapter was formed during 1958 in Greensboro, North Carolina (now called the Triad Chapter). The Raleigh-Durham Chapter (now called the Triangle Chapter) followed behind in 1963. Subsequent chapters were formed in Virginia, North Carolina, South Carolina and Georgia and Florida. Vern W. "Bill" Helms of the Charlotte Chapter was elected as our first National President in May 1975 during the first annual convention at Myrtle Beach, South Carolina. Since then, PCEA has grown to almost 1,000 members with twelve chapters in five states. Current goals include active expansion to other market areas.

PCEA members have always been active in the promotion of construction education for the betterment of the industry. Each chapter individually coordinates, develops and establishes programs to assist and enhance the educational endeavors in their community while pursuing the educational goals of membership. PCEA Chapters support educational programs ranging from, but not limited to, scholarships to local students, endowed scholarships at several Universities, providing construction instructors, purchasing equipment for use in technical training and introducing construction as a trade to "at risk" students.
Officers and Board Members for 2017-2018

Members Corner
Dedicated to our members and family
If you, or you know of someone having personal or health issues please let me know, so their needs can be noted.

Please keep the following members in your thoughts and prayers;

* Our Soldiers and Sailors near and far
* Kevin Sherron        Knee Surgery

PCEA Triangle Chapter 3 Scholarships:
PCEA recognizes that one of the greatest problems facing our industry is a shortage of interested and well qualified employees at all levels. To that end, our mission is to extend Scholarships to persons interested in pursuing a career in the construction Industry.

The following Scholarships are funded by the PCEA Triangle Chapter fundraisers and events. (Please see a Faculty Representative at these schools to receive an application).

**PCEA Member Dependent Scholarship**
The PCEA Member Dependent Scholarship is available to immediate family members of PCEA members in good standing. The recipient of this Scholarship does not have to be pursing a degree in the Construction Industry.

North Carolina State University
University of North Carolina at Charlotte
East Carolina University
Wake Technical Community College
Vance Granville Community College

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Regular Meeting Minutes
Triangle Chapter
Professional Construction Estimators
Association of America, Inc.

February 15, 2018
Regular Meeting Minutes

Meeting held at Casa Carbone, Raleigh, NC. Attendance: 17 members and 4 guests. Call to Order at 7:00 PM by President Ryan Degnan.

Secretary – January Meeting was cancelled due to snow and ice.

Treasurer – Kevin was unable to attend due to knee injury and surgery. Treasurer’s Report will be provided at next month’s meeting.

1st Vice President – We had 4 guests at this month’s meeting:
- Todd Elfont – Skanska Construction Co
- Andy Gray – Skanska Construction Co.
- Guest Speaker Dean Waldrop – CSI / Hazen & Sawyer
- New Member Tom Key – Danis Construction Co.

2nd Vice President – As always, please forward any suggestions for programs to Tom Von Cannon.

Education – No Report

National Director:
- The 2018 National Convention will be a cruise that leaves out of Miami, April 19th – April 23rd. Everyone should have received an email with the information. Deposits are due by December 10th.
- Next National Board Meeting is Friday, 2/16/18.
- Fund Raising:
- The golf tournament is being held at MacGregor Downs Country Club on Monday, 3/26/18.
  Social – Next meeting is being held at Hooters at Morrisville, on March 15, 2018.
- We are trying to confirm a location in Durham, NC for the April meeting. The April Meeting will be held on April 12, in lieu of the normal night, due to the National Convention date.

Old Business – None

New Business – None

Program – The guest speaker was Dean Waldrop, with Construction Specialties Institute. Dean led a discussion about the CSI Formatting. Members of CSI include Architects, Engineering, Contractors, Suppliers, Attorneys, etc. CSI has Certification programs. CSI has a chapter in Raleigh with monthly meetings and/or events.

An enthusiastic discussion of Bids and Specifications and how they affect the Owners, Designers, Subcontractors, Suppliers, and General Contractors. How do GC Estimators evaluate bids, when specifications are incorrect or unclear? How do Subcontractors and/or Suppliers provide responsible bids when the specifications are incorrect or unclear?

Gold Roll – Tony Luise won the Gold Roll and let it roll.

Meeting adjourned at 8:10 pm.
Respectfully submitted,
Chris Kelley
Chapter Secretary
New Member’s Corner
Please welcome our newest member of the Triangle Chapter of the PCEA;
Mr TOM KEY cec, LEED AP DANIS | SENIOR ESTIMATOR TOM.KEY@DANIS.COM
TOM REPRESENTS DANIS CONSTRUCTION., AS THEIR SENIOR ESTIMATOR.

Since 1916, Danis has been privileged to work on some of the most recognizable and high-profile commercial buildings and industrial projects in the Midwest, Southeast, and Carolinas. Our work includes partnerships with Fortune 500 Companies, rapidly expanding healthcare systems, and distinguished universities.

Tom is an alumni of North Carolina State University. Receiving his BS in civil engineering and Construction Science in 1983.

Working his way up the ladder he worked with Caddell Construction. Caddell is a large General Contractor that works around the world on major construction projects that include much Military work. Caddell is an excellent Contractor based in Montgomery, Alabama, and are held in high regard world wide. Tom was their senior estimator.

Moving back into North Carolina with Bovid Lend lease office in Charlotte in 1999 as their Pre-construction Manager.

Tom was offered and advancement and opportunity with Cox Schrep as their Chief Estimator also located in Charlotte in 2008.

Taking another rung up the ladder he took a position with Rodgers Construction in Charlotte as their Senior Pre-construction Project Manager in 2010

It is our good fortune that has allowed Tom to come back to Raleigh starting in 2013 and represent Danis as their Senior Estimator.

Tom has a great depth of experience and has progressively met and lead the companies he has represented to better opportunities.

We need the Tom Keys, the Reubin Gillis’s the Rick Embrey's, and Kevin Jackson’s in our area to be part of our organization. Their professionalism adds Creed to our Organization and draws others into our organization. Just as our current and past members have drawn additional members to join our group, so will the new members.
For our Local Triangle Chapter of the PCEA to grow and flourish we need to continue to bring in new members. The very best way to grow our membership is through the word of mouth of an active membership.

Since our founding in 1956, the PCEA has had but one goal to raise the professionalism and competence of our membership in support of the Construction Industry.

We do this in several ways.
I. By providing educational opportunities for our members.
II. Offering online accredited training at a reduced cost to our members.
III. Monthly presentations, during our monthly meetings, by professionals who have support roles for the Construction Industry or professionals who have interesting subject matter relevant to current events.
IV. Monthly News Letter that provides construction related articles, amusing factoids, and a format that allow for promoting Construction Businesses through paid advertising.
V. Member Dependent College Scholarships Opportunity

We offer our support to you and your business, either through your membership or through our paid advertising. Either way you will gain access to our membership opportunities, or direct access to our members and readership throughout the southeastern United States.

Our Organization has Members and readership in North Carolina, Virginia, South Carolina, Georgia, and Florida. We are hopeful that by reading this note and the attached copy of our most recent Triangle Chapter News Letter, that you would choose to join our organization as a paid member or at the very least, advertising your business, or employment needs in our monthly news letter.

Your paid membership or paid tax deductible advertising supports the local Triangle Chapter’s annual Scholarships and ongoing educational activities.

Full Page Advertisement Free for Firm making a presentation for the monthly meeting
Full Page Advertisement Free with Paid New Membership.

| Full Page Advertisement per Year | (12 Issues) | $500.00 |
| Full Page Per Issue | $300.00 |
| Half Page Advertisement per year | (12 Issues) | $300.00 |
| Half Page Per Issue | $250.00 |
| Quarter Page Advertisement per year | (12 Issues) | $200.00 |
| Quarter Page Per Issue | $100.00 |
| Business Card Advertisement per year. | (12 Issues) | $100.00 |
| Business Card Per Issue | $ 50.00 |
| Include Link to your Company News Letter Per Year | (12 Issues) | $ 25.00 |
| Help Wanted Adds 1/2 Page “Help wanted Adds” | (Per Issue) | $ 00.00 |
Technology is on the rise in the construction industry, with an increasing number of construction companies deploying an array of leading-edge technologies across the project lifecycle. While traditional construction software has failed to solve construction’s productivity problem, mobile technology solves the two primary pain points driving digital transformation in the construction industry. Mobile construction apps not only reduce risk and help construction professionals maintain their bottom line, but also help teams communicate and share documents both in the field and office.

• The high return on investment construction professionals can expect from mobile technology
• How to craft a strategy to increase technology adoption within your organization
• How to determine the ROI from your investment in mobile construction apps
5 Examples of Construction Technology
Crucial to Stay Competitive

The Best Examples of Construction Technology Used On-Site

1) **Wearable Technology** The rise of wearable technology like Google Glass creates significant new opportunities for the construction industry. Your managers and workers can use wearable technology in the field to easily view blueprints and work instructions, monitor workers’ health and well-being, take photographs and video and communicate with faraway coworkers.

2) **In-Cab Cameras** To improve safety and security, you can install in-cab cameras in your construction vehicles. The cameras can assist with vehicle training and monitor workers’ driving and performance while on the job. Some companies are even using recorded photos and video in the event of an accident or insurance claim to verify and support their worker’s actions and decisions.

3) **Drones** You can use unmanned aerial vehicles, better known as drones, to venture into places that humans and ground-based vehicles could only dream of reaching. From high up in the air, drones can easily take progress pictures and aerial surveys, using their on-board cameras to obtain high-resolution photographs and video and sending the results back down to earth.

4) **LIDAR** Light Detection and Ranging (LIDAR) technology is used on the field to check the security and suitability of the site. LIDAR scanning can document the existing conditions of infrastructure or facilities to make sure that the blueprints match the physical reality, minimizing the risk that your teams will encounter a stray underground pipe or physical anomaly during construction.

5) **Phablets** The use of “phablets,” mobile devices with a screen size somewhere between a smartphone and a tablet computer, is on the upswing at construction sites. Phablets combine the communication ability of smartphones and the larger screen size of tablets, allowing your employees to view drawings and detailed reports.

While all five of these trends have already made their impact in on-the-field construction management, they are only part of the technological changes that will transform the construction industry. For example, construction software is moving more and more into the cloud, and designers can use software like Autodesk and Sefaira to perform energy analysis of their prototypes. With the pace of technological innovation poised to accelerate, the construction industry is perfectly positioned to take advantage of these events in years to come.
Artificial intelligence continues its progression into the mainstream

It has been nibbling away at the fringes, but artificial intelligence is poised to chomp its way into the mainstream

Artificial intelligence, or AI, and machines threatening humanity’s status quo have, for decades, been the staple of dystopian science fiction. Now the bot has bolted. AI is walking and talking among us, and early business adopters are most likely to prevent a doom-laden conclusion.

Thanks to the advent of enabling technologies – machine-learning, inexpensive high-speed internet, secure cloud storage, mobility solutions and low-cost devices – the fantastical possibilities of the past have become reality. Voice-recognition systems are ubiquitous, driverless cars are queueing up to be unleashed on our roads and chatbots are so advanced it can be impossible to determine whether the online customer-service operative you are communicating with has a pulse.

AI is now poised at the impact threshold of shifting from emergent and peripheral to mainstream and increasingly omnipresent

Experts agree that 2018 is likely to be the year AI breaks into the mainstream. The joke that machine-learning is like teenage sex – everyone talks about it, but very few actually have it – is outdated. It is time for C-suiters to get serious and engage with AI, realize its huge untapped potential and take the lead in shaping the present, as well as the future. Simply put, those who fail to evolve their business plans face being washed away.

“Everything invented in the past 150 years will be reinvented using AI within the next 15 years,” predicts San Francisco-based Randy Dean, chief business officer at Launchpad.AI. “Every industry is going to be affected; almost every enterprise problem is ripe for an AI-derived solution or improvement. In the same way that the internet rippled through the business community over the course of ten to fifteen years, and the mobile did the same, AI will take that same path.”

Consider that since 2000 more than 52 per cent of Fortune 500 companies have gone bankrupt, been acquired or folded. It pays to invest and harness nascent, disruptive technologies, evidently. “Look at the market leaders 20 years ago, some of them don’t exist,” says Mr Dean. “And the ones that are leading now had not been established back then. In essence, if there is any process a computer or machine can do more efficiently or rapidly, then the business model needs to change.

“It will take multiple years for organizations to begin to take full advantage of AI, but it is something that business leaders need to focus on, otherwise they are going to start losing ground to competitors that are using it. There is a sense of urgency because 2018 is certainly going to be the year that most progressive organizations formulate plans around AI.”
Calum Chace, author of *The Economic Singularity*, agrees that while the maximum disruption wrought by AI will take a decade or more, it is paramount business leaders don’t ignore it. “In the medium to long term, AI will change everything,” he says. “In the short term, companies are working with chatbots, robotic process automation and analyzing huge pools of data for correlations, which yield interesting and valuable insights about their customers.

“As such, AI doesn’t currently reset the world to a blank slate and I don’t think companies should rip up their traditional plans. However, organizations will be in jeopardy if they are not thinking hard about how to deploy AI, learning and experimenting with it, and scanning the horizon to see what other companies and new entrants are up to with it.”

Shashi Nirale, Servion Global Solution’s senior vice president and general manager for Europe, Middle East and Africa, thinks immediate adoption is critical. “We estimate that by 2020 some 95 per cent of customer interactions will be carried out by some form of AI,” he says. “Advances in speech recognition, biometric identification and neurolinguistics will also mean that as customers interact with businesses and brands via voice, our experiences will become increasingly conversational and human-like.”

**ADDRESSING ANXIETY**

Anxiety caused by the perceived threat of robots needs addressing; management could be nervous over how to implement changes or employees, perhaps older and more set in their ways, could be wondering if they are still relevant.

Often concerns are exaggerated. Virtusa is a global technology consultancy that works in the banking sector, where Bob Graham is global solutions head for banking.

He says it is rarely an “all or nothing” scenario; perhaps on tasks that had already been outsourced to a cheaper offshore center, for example.

“We are seeing some of those tasks coming back in-house, where the robots are taking over the tasks and incumbent staff will manage the robots,” says Mr Graham.
In almost every type of job there are meetings, some of them are necessary and others seem to have no purpose at all. The construction industry is no exception. Too many meetings end with people wondering what they signed up for. Meanwhile, the meetings that don't happen enough lead to miscommunication and confusion. So how do you make the most of your meetings? Start by asking yourself if the meeting is necessary, who absolutely needs to be there, and what you want to get out of it. Want more tips and tricks?

**A Dozen Tips for Holding A Successful Meeting**

How do you hold a meeting that everyone wants to attend? Do you..

A. Give away valuable prizes and make sure everyone wins something?
B. Threaten them with their jobs if they don’t attend?
C. Have free drinks and food?

As you might have expected, the correct answer is actually D. none of the above. Rather than instead, follow these guidelines. Rather than bribing or threatening people to attend your meetings, try out some of these tactics:

1. **Make Sure It’s Necessary**

Don’t schedule meetings that aren’t really necessary. Everybody has plenty to do without going to meetings that waste their time. A meeting also needs a very clear objective. What is the outcome you expect?
2. Refine Your Attendee List

Don’t invite people who don’t need to be there. There’s nothing more annoying than sitting through a meeting that’s regarding nothing relevant to you. If you need to iron out clashes among three trades, include only the necessary people from your own team who have direct oversight or specific input.

3. Set A Time Limit

If you’ve set a well defined objective you can do a lot in a short time. If you find you have to hold meetings that run an hour long, or longer, the objectives are probably too vast. Hold a series of meetings instead of trying to cram everything into one. A rule of thumb is to aim for 30 minute meetings. There are apps available that will time the meeting with popup notices at set intervals to keep people aware of the ticking time. You could also set up a cooking timer or other device to keep people focused on brevity.

4. Get Visual

Whatever you can do to present information visually and succinctly will really make a difference in audience participation. You don’t need one of those new fancy whiteboards, but you do need something that’s visible to all attendees and allows participants to show information visually. Put your objectives at the top along with any guidelines for participant interactions.

5. Don’t Be Afraid to Limit Cell Phone Use

There is a growing call for people to be more present in their interactions, and mobile devices, especially cell phones, are great interrupters. One CEO goes so far as to require cell phones be turned off during some meetings. It’s one thing if people will use their phones or tablets in some way that augments the meeting. But, it’s quite another if the calls relate to things that can wait. And most of the time, they can wait.

6. Practice, and Require Accountability

Inform participants of the objective at the beginning of the meeting, and ask everyone to offer insights based on facts. Ask participants to clearly state when they are using opinions. If you “own” the meeting then it’s expected you will overview the objective and guide the discussion and interactions. Be accountable to that without monopolizing the meeting by covering your perspectives at length. Tell participants when decisions have already been made, and the topics that are not open for discussion.
7. Encourage Interaction

It takes nerve, but you should be willing to let anything happen, short of breaking common courtesy, safety, and security boundaries. Instead of having people listen to talks before they offer their information or opinions, allow interaction on the fly. As long as you have a clear objective which you keep guiding people back to, you’ll speed up the meeting and get better outcomes.

8. Be Open to Flexibility

Detours happen, and add value, sometimes in the best ways. Allow new ideas, and stories that match the objective to have places in the discussion. Flexibility within the confines of the objective ensures the group doesn’t miss out on innovation.

9. Accommodate Off-topic Input

Even though you want to keep the meeting tracking to the objectives, don’t lose insights. In construction, everything is related to something else. When people offer input that links to other topics, don’t ignore it. Make notes and tell the participant that although it doesn’t directly relate to the objectives, you will refer them to someone, or get with them after the meeting.

10. Don’t Be Afraid of Silence

It often takes time and a gentle nudge to get people talking. According to Josh Neblett, cofounder and CEO of the e-commerce company Etailz, silence works well. When there is a freeze in conversation, he says just sitting silently, and looking from person to person will definitely get questions flowing. From there, others will often chime in with answers and ultimately discussion will follow.

11. Empower Participants

Once the meeting is running, people genuinely want to reach its objectives. But, there are always some people who get sidetracked or who want to rehash what’s already been covered. When you empower participants to help keep things on track, you gain the advantage of peer pressure. You wouldn’t do this at every meeting, but when you know you will have disruptors participating, you might find the group useful for keeping things on track.

12. Sum Up and Own Up

Too many meetings end with people wondering what they signed up for. Make sure that doesn’t happen at your meetings.
The Great Tax Credit Shuffle and the Changes Underway

Low-Income Housing Tax Credit

Since its inception, the LIHTC has helped finance almost 3 million rental units. While Congress left this tax credit untouched in the Tax Cuts and Jobs Act passed in 2017, lawmakers ignored warnings of how the lowering of the corporate tax rate would affect it. Cutting the corporate tax rate meant a corresponding drop in the value of the tax credits offered by the LIHTC. In 2016, observers predicted the value of these tax credits would drop by 14 per cent if the federal government lowered the corporate rate to 20 per cent.

The lower value means fewer investors using the credits. The lower value means fewer investors using the credits. Also, it will require states to come up with more money for low-income housing developments on their own. Some experts predict investors will continue getting out of their existing investments under the LIHTC, driving down the credit's value even more.

Over the past decade, many multifamily developers and builders have concentrated on building in high land price areas, like city centers, to cater to nearly 3 million new renters with high incomes. So, today, there's plenty of housing choices for people earning over $100,000 a year. on the other hand, those earning the median income of $37,300 have fewer affordable options, and often have less than $500 a month leftover after paying rent.

Sidelining the LIHTC means fewer accommodations for the elderly, those with lower incomes, and the disadvantaged. If the predictions prove true, contractors and developers will build 260,000 affordable living spaces less over the next decade. This could still change if lawmakers move to support the value of the LIHTC credits.

Sidelining the LIHTC means fewer accommodations for the elderly, those with lower incomes, and the disadvantaged.

In early 2017, senators introduced the Affordable Housing Credit Improvement Act of 2017 to strengthen the LIHTC. It hasn't gone anywhere yet, but in the light of having a similar bill in the House, it's possible Congress will revisit the negative tax credit issues caused by the 2017 tax law.

In a related development, Fannie Mae and Freddie Mac announced in November they were getting back into the LIHTC market. Then in February, Fannie Mae "announced a $100 million low-income housing tax credit fund" to support affordable housing. The credits will go to places affected by Hurricane Harvey, Native American housing, and multifamily projects in underserved areas.

New Markets Tax Credit

This credit goes to the private investors who fund businesses or developments in places where 20 per cent of the people live in poverty or where family incomes are at least 20 per cent lower than area incomes. This credit typically funds construction projects that include community centers, job training centers, grocery stores, mixed-use commercial, and, even, hospitals.

Investors who claim the tax credits for a qualified project can reduce their tax liability equal to 39 per cent of their investment and do it on a dollar for dollar basis over seven years. Using this credit, developers and contractors have built out 178 million square feet of manufacturing, office and retail space since 2003. The recent changes to the tax laws didn't extend this credit, and it is due to expire at the end of 2019. Legislators introduced the New Markets Tax Credit Extension Act of 2017 to the U.S. Senate in February 2017 where it was referred to committee, and it remains. The legislation would make the credit permanent.

Historic Tax Credit

While this credit survived through tax reform legislation, it saw a lot of changes, according to an article in the National Law Review. Gone is the 10 per cent tax credit for rehab expenses on buildings dating before 1936 and not listed on the National Register, or otherwise certified.

The recent changes to the tax laws didn't extend this credit, and it is due to expire at the end of 2019.

Taxpayers who rehabbed a historic building used to be able to get a tax credit for 20 per cent of what they spent. Now, investors must claim the 20 per cent "ratably over a five-year period starting the year the building is put into service." Also, when corporations calculate the new Base Erosion and Anti-Abuse Tax (BEAT), they can't claim any of their HTCs or NMTCs. And since the HTCs usually get shifted to investors in historical projects, the requirement to claim the investment credits over five years dampens the credit's value.
Data—Construction Hype / Construction Gold?

Today’s data storm raining down on construction companies is causing some owners and managers to withdraw and hang tight to the past in an effort to keep things from changing. While change always requires losses of some kind, it also offers countless opportunities.

There are few studies specifically focusing on the amount of data used in typical construction projects, but the amount of data per project is most definitely on the rise. One source compared the change in data volume over a span of 10 years. In 2004, a project typically required 100 gigabytes of data, while one in 2014 required 6.6 terabytes (6,600 gigabytes). Another project involving the expansion of a medical building reported a document load of about 0.5 gigabytes per user.

However, in most cases, you use that data all at once and then archive it. And, while data volume says little about data quality, you have to wonder what you are missing if you don’t at least look more deeply at it. People are often pleasantly surprised at the insight and value derived from data analysis.

Today’s Data is Your Crystal Ball

There are infinite ways for you to improve outcomes on future projects by harnessing past project data and testing it against current projects. Consider project budgets for one.

In any case, you are using information that you already own to gain insight, manage change, and keep your business competitive. And that’s the ultimate value in collecting, analyzing, and reporting on your data.

Every contributor leaves a stamp on the project budget. You might not notice on any given day that materials deliveries from a supplier are slipping over time, but when you take a step back and look at the timestamps on deliveries from the past month, you may see a pattern emerge. The same might occur when you look at material prices over time. Small, incremental price increases go largely unnoticed in the day-to-day, but they add up to potentially significant numbers when you view their aggregate effects.

You don’t need a private investigator to solve this case.

The information you uncover might be worthy of deeper analysis that could lead to changes on the next project when it comes to where and how you source materials. This type of consideration is even more important today because products are sourced globally and undergo tremendous time pressures in making their way to your project.

Material quality can vary greatly, and there are always threats of counterfeit products slipping into your supply chain. If you are collecting and analyzing material source and quality data, you have a database of potentially critical information. You can use that information to guide your choices in your current project as well as future ones.
Get Ahead of Risk

Construction projects hold tremendous risk, which is why they are sometimes described as exercises in managing risk. Your company's history holds insights invaluable to assessing and planning for risk. After all, the key to managing risk is to be one step ahead of it. You either need to mitigate it or insure against it. But before you can do either of those, you need to be able to recognize it. That's where history comes in—the history in your data.

Prime contractors are greatly affected by the performance and nonperformance of subcontractors on the project. Subcontractors themselves are often responding to the demands of more than one general contractor, and that puts challenging requirements on their schedules. Subcontractor performance often takes a gradual path to decline starting with inconsistencies. Inconsistency in quality, attendance, schedule performance, and reporting add up to a subcontractor on the verge of becoming a project risk.

If you aren't following the data and information that provide insights about your subcontractors' performance, you might never know about any issues until it's too late. The same performance information can also help you sort your options when selecting subcontractors for upcoming projects.

Data = Money

Equipment is a resource with widely variable expense. When you use telematics as one of your equipment management tools, you gain insights that not only reduce risk, but also boost efficiency in equipment use and project planning. When you are aware of potential equipment problems, you can take the necessary steps to repair them before a crisis occurs. The same knowledge can help you maintain the machine's performance so that it doesn't degrade over time. With advanced notice about equipment wear, you can manage spare parts more efficiently and reduce machine downtime.

Collecting, analyzing, and reporting on information and data harnesses knowledge that is otherwise used once, and then stored. Just take a moment to consider the knowledge in the vast array of construction documents…

The documents used for design and product specifications tell the original intent of the construction project. When you view those in relation to RFIs, submittals, change orders, notes, meeting minutes, and schedules, a much larger body of knowledge emerges that can influence decisions on future projects. This is the point where you move from being reactive to proactive in managing construction projects.
Pain Point: Potential recruits not following through.

It’s hard to understand. You find someone who looks as if they’d be a great employee. Their resume and hiring information shows they have the right skillset, but after initial contact they never set up an interview appointment, or, they do an interview, but don’t accept a job offer.

Cure: Assess your company’s attractiveness as an employer.

You can’t please everyone, so accept there are people who won’t work for you regardless of the benefits and pay. But for everyone else, there are things you can do to make your company more attractive as an employer. Start with the basics:

• Take a close look at your pay and benefits to see whether they are similar to what your competitors offer.
• Look at your project history and current backlog to assess the strength of your steady employment offer.
• Assess your training and other factors that can help employees with career advancement.
• Look closely at your business infrastructure and assess not only the working conditions, but also the quality of tools, equipment, and technology.
• Consider your management and leadership to see where there are shortfalls in quality, commitment, and experience.

Address the places where you find deficiencies, and for those instances that will require more time to address, point out to potential recruits how you are changing things.

Pain Point: Not finding potential recruits with the necessary skills.

There are some skills that have a chronic shortage of candidates. These include construction laborers, electricians, carpenters, plumbers, welders, and equipment operators. These shortages, however, are not solely linked to not enough people available. There are also systemic issues in construction and within the national labor force that contribute to these labor challenges. And, there are training factors like an over emphasis on four-years of college, and a reduction in educational opportunities for people who are interested in the trades.
Cure: Use multiple tactics and strategies for discovering likely candidates.

Use these tactics to immediately increase your pool of available candidates.

- Offer incentives to employees for recommending potential recruits.
- Pay attention to local, regional, and national labor news to get insights about the changing labor picture for closely related industries like manufacturing. These related industries offer a source of employees who are not only looking for work, but are easily trained for construction work.
- Find out what others in your trade are doing to attract qualified recruits.
- Get on social media, engage with people, and actively seek candidates by posting your job openings and asking those within your company to share the postings.
- Search on state-run job boards for veterans and people with oil and gas industry experience.

Use these strategies as your more long term effort.

- Try out temps and freelance workers to handle short term assignments with an eye for finding those who might become full time employees.
- Partner with local trade schools to offer on-the-job training where you might potentially discover recruits.
- Set up a regular event each month where you accept applications and interview candidates.

Partner with trade unions.

Pain Point: You hire someone, get them up to speed, and another subcontractor poaches them.

By most accounts, the war for talent is going to continue and there are times when you just can’t do anything about it. But for most of those other times, forget about relying on legal contracts like non-competing and non-solicitation agreements. They are usually not enough on their own, they cost money to enforce, legislation often goes against them, and they stifle performance. There are better ways.

Cure: Use a strategy that combines awareness and action.

Most people who decide to jump ship do so after a trigger event. Maybe they didn’t get promoted, missed a raise, felt shorted on a bonus, or got a new supervisor who they feel isn’t as qualified as themselves.

When you get wind of it, try talking with the person about the reasons they are unhappy. Let them know you’d like to try to fix it, but avoid jumping to counter offering. If they are unhappy, a counter offer simply means you’d like to extend their unhappiness by making it more palatable. Most people would rather be happier. Instead, try to find a solution that will help the person feel valued while still acknowledging the value the business provides to them.
Act Now, Not Later

When you are proactive, you begin to look for and become better at recognizing new options and opportunities. Maybe your newfound knowledge shows you that buying materials on a multi-project basis will cushion you against a trend of rapidly rising prices. Or, that you need to make adjustments in your current lineup of subcontractors and vendors because your upcoming projects are too geographically dispersed.

In any case, you are using information that you already own to gain insight, manage change, and keep your business competitive. And, that's the ultimate value in collecting, analyzing, and reporting on your data.

If someone does leave, make sure you pay attention to those left behind who worked closely with them. Sometimes one poaching leads to multiple poaches as another business looks to build strength in a specific sector of construction. You need to assess your exposure and work with those who are vulnerable.

Pain Point: You just hired someone with all the skills, but they struggle to get the job done.

Unless there is a personal situation that came up between the time they were hired and when they started working, it’s a good possibility you need to improve your selection process.

Cure: Stay focused on the skills you need and the candidate vetting process.

Use clear, concise job descriptions that aren’t written as if the person must be a jack-of-all-trades. Many companies write job descriptions that no person could humanly handle. In the interview ask leading questions so you get an idea of how they handle stress, what makes them unhappy at work, and how they view their career. Be thorough about reviewing their work history. Is it complete? What is the depth of their job knowledge and experience?

Although it is widely stated, you’d be surprised how many companies fail to use appropriate means in checking out potential employees. It’s very important to use a thorough and expansive process, and not to eliminate or include a person based on singular aspects of their past.

To avoid legal complications and find the best people for the job you are offering, consider involving legal counsel in setting up your candidate vetting process. To further safeguard your hiring practices, consider hiring a company that specializes in background checks.
February Presentation

Construction Specifications Institute

The Construction Specifications Institute (CSI) is an organization that keeps and changes the standardization of construction language as it pertains to building specifications. CSI provides structured guidelines for specification writing in their Project Resource Manual, (formerly called the Manual of Practice (MOP)).

MasterFormat. ... Sometimes referred to as the "Dewey Decimal System" of building construction, MasterFormat is a product of the Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC).

16 Divisions refers to the 16 divisions of construction, as defined by the Construction Specifications Institute (CSI)'s MasterFormat. ... The standard is the most widely used standard for organizing specifications and other written information for commercial and institutional building projects in the U.S. and Canada.

Our February Speaker was:
Mr. Dean A. Waldrop, RA, NCARB, LEED AP
Associate | Hazen and Sawyer
919 755-8599 (direct) | 919 395-3699 (cell)
dwaldrop@hazenandsawyer.com | hazenandsawyer.com
Chapter President at Construction Specification Institute, Raleigh- Durham Chapter

MasterFormat. ... Sometimes referred to as the "Dewey Decimal System" of building construction, MasterFormat is a product of the Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC).
March 15  PCEA Social  NCAA –Hoops  Starting @ 18:30  
In Lieu of our Normal Monthly Meeting  
Meet at the Hooters in Morrisville, NC for Wings, Beer and Basketball. Please come and bring a guest.  
1001 Claren Circle, Morrisville, NC 27560

・ Ballot preview of Officers and Board Members

March 26 PCEA Spring Golf  Starting @ 11:00  
430 St Andrews Lane, Cary, North Carolina 27511

30th Annual Don Mizelle Spring Golf Tournament at MacGregor Downs Country Club  
MacGregor Downs Country Club is located between Kildaire Farm Road and US 1/64 West, in south Cary, North Carolina. The Clubhouse is at the center of the MacGregor Downs residential community.

April 12-2018 Triangle Chapter Monthly Meeting  Starting @ 18:30  
Guest Speaker Dudley Willis, Assistant Director of Project Management, who handles all of our Housing and Student Affairs projects and also our Duke Kunshan Campus having spent two years in China for Duke He will speak to our group on current and upcoming projects.  
Croasdaile Country Club  in Durham for our April 12 Membership Meeting.

http://www.croasdailecountryclub.com/

April 12-2018 Vote for Officers and Board Members—Get involved!
Apostrophe

The apostrophe ( ’ ) has three uses: contractions, plurals, and possessives.

I was reminded several days ago how lax we have become in our e-mail writing. I’m not a LOL / OMG kind of guy. But I have noticed in our rush to get information out, we do not always punctuate our digital conversations properly. So as a reminder and call to action, “Don’t forget to apostrophe”!

Contractions

Contractions (e.g., let’s, don’t, couldn’t, it’s, she’s) have a bad reputation. Many argue that they have no place at all in formal writing. You should, of course, observe your publisher’s or instructor’s requirements. An absolute avoidance of contractions, however, is likely to make your writing appear stilted and unwelcoming.

If you are unsure where to insert the apostrophe when forming a contraction, consult a good dictionary. Avoid the most common contraction–apostrophe error: the contraction of it is is it’s; without the apostrophe, its is the possessive form of it.

Example: It’s often said that every dog has its day.

In informal writing, it is acceptable to indicate a year with only the last two digits preceded by an apostrophe (e.g., the class of ’85, pop music from the ’80s).

Plurals

The apostrophe is seldom used to form a plural noun.

Incorrect: Since the 1980’s, the Thomas’s, both of whom have multiple PhD’s, sell old book’s and magazine’s at the fair on Saturday’s and Sunday’s.

Correct: Since the 1980s, the Thomases, both of whom have multiple PhDs, sell old books and magazines at the fair on Saturdays and Sundays.

The rare exception to the rule is when certain abbreviations, letters, or words are used as nouns, as in the following examples. Unless the apostrophe is needed to avoid misreading or confusion, omit it.

He received four A’s and two B’s.

We hired three M.D.’s and two D.O.’s.

Be sure to cross your t’s and dot your i’s.

Do we have more yes’s than no’s?

For this last example, the trend is to instead write yeses and noes.

Possessives

The formation of possessives is treated in different ways by different authorities. The rules below are based on The Chicago Manual of Style, 16th edition, and are appropriate for most writing. Associated Press style, used by most newspapers, is slightly different. See the essay on style for more information.
The general rule for forming possessives

The general rule is that the possessive of a singular noun is formed by adding an apostrophe and *s*, whether the singular noun ends in *s* or not.

- the lawyer’s fee
- the child’s toy
- Xerox’s sales manager
- Tom Jones’s first album
- Jesus’s disciples
- Aeschylus’s finest drama
- anyone’s guess
- a week’s vacation

The possessive of a plural noun is formed by adding only an apostrophe when the noun ends in *s*, and by adding both an apostrophe and *s* when it ends in a letter other than *s*.

- excessive lawyers’ fees
- children’s toys
- the twins’ parents
- the student teachers’ supervisor
- the Smiths’ vacation house
- the boys’ baseball team
- the alumni’s fundraising
- someone with twelve years’ experience

Exceptions to the general rule

Use only an apostrophe for places or names that are singular but have a final word in plural form and ending with an *s*.

- Beverly Hills’ current mayor
- the United States’ lingering debt problem
- Cisco Systems’ CEO

Nouns that end in an *s* sound take only an apostrophe when they are followed by *sake*.

- for goodness’ sake
- for conscience’ sake

A proper noun that is already in possessive form is left as is.

- T.G.I. Friday’s menu was recently changed.
Shared or individual possessives

Joint possession is indicated by a single apostrophe.

Robert Smith and Rebecca Green’s psychology textbook. (they coauthored the book)
Stanley and Scarlett’s house. (they share the house)

Individual possession is indicated by apostrophes for each possessor.

France’s and Italy’s domestic policies are diverging.
Chris’s and John’s houses were designed by the same architect.

Avoid awkward possessives

Correct but awkward: St. Patrick’s Cathedral’s Fifth Avenue entrance.
Better: The Fifth Avenue entrance for St. Patrick’s Cathedral.

The apostrophe with other punctuation

The apostrophe should never be separated from the word to which it attaches by adjacent punctuation.

Correct: The house on the left is the Smiths’, but the house at the end of the street is the Whites’.
Incorrect: The house on the left is the Smiths,’ but the house at the end of the street is the Whites.’
Membership Meeting Scheduled
4-12-2018
Pre-meeting Social Starts @ 18:30
Croasdaile Country Club.

Address:
Croasdaile Country Club
3800 Farm Gate Avenue
Durham, NC 27705

Croasdaile is conveniently located within minutes of downtown Durham, Duke University and the world-renowned Duke Medical Center, fifteen minutes from Research Triangle Park and twenty-five minutes from RDU International Airport.

The April Meeting is being relocated to Croasdaile Country Club, for April’s Membership Meeting. Please join us for this meeting. We promise to have a good meal and a very interesting Speaker this month.
Membership Meeting Scheduled
4-12-2018

Croasdaile Country Club.

Dudley Willis, Assistant Director of Project Management, who handles all of our Housing and Student Affairs projects and also our Duke Kunshan Campus having spent two years in China for Duke.

Mr Willis will be detailing the upcoming and current projects in the works both on campus and off campus.

This is a rare opportunity to hear and learn what opportunities are upcoming in the Duke Project Development Group that Mr Willis is part of. Duke has a history of working with the community and to using local Contractors to build added buildings and renovate older buildings.
Board and Officers Elections will be held during this month's Membership Meeting.
Meeting Scheduled
4-12-2018
@ Croasdaile Country Club.

Please take the time to make your voice heard. Pick from the nominees or write in candidates that not listed that are willing to Serve.

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