SEPTEMBER 2018 | CONSTRUCTIONBUSINESSOWNER.COM

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THE LEADING BUSINESS MAGAZINE FOR CONTRACTORS



INSIDE THE MINDS OF MODERN LEADERS

How **Dan DeRose** & owners like him are rewriting the standards of executive management

IN THE OFFICE
3 MISTAKES THAT COULD DERAIL YOUR BUSINESS TRANSITION PLAN

IN THE FIELD
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FROM THE EDITOR | Kathy Wells

In our cover series this month, we're discussing leadership, focusing on the techniques, management styles and employee development tactics that make it one of the most important jobs in the industry. On the cover is Dan DeRose, owner and president of Mazza Mechanical Services in Olean, New York. Mazza's leadership team has more than 85 combined years of experience in HVAC, design-build construction, and energy conservation. In "Inside the Minds of Modern Leaders" on page 30, you'll learn from the insights and experiences of DeRose and other industry leaders, such as Andy Rodenhiser, owner of Rodenhiser Home Services, and Elena Gerstmann, deputy executive of operations for the American Society of Mechanical Engineers, as they share their thoughts on developing leadership goals using discipline, networks and mentors, as well as exploring new frontiers.



Managing Editor Elizabeth Manning (pictured here with the AECOM Hunt team) recently traveled to Indianapolis, Indiana, to visit the AECOM Hunt BIM/VDC team and learn how they're using Autodesk BIM 360 to streamline preconstruction and project processes. Read in-depth coverage of the trip at constructionbusinessowner.com.

Next, we explore a burgeoning approach to leadership in "The Age of Empathy." Many owners now practice empathetic leadership, or the idea that leaders should understand, relate to and be sensitive to customers, colleagues and communities as a way to increase engagement and satisfaction among the workforce. Two such contractors using this strategy are Wesley Palmisano, president and CEO of Palmisano Contractors, and Michael Greenawalt, senior vice president of Rosendin Electric. Turn to page 34 to read their thoughts on the topic and learn what they're doing to listen to their employees and create a better company culture.

The way construction business leaders represent the industry to their employees, clients, partners and the public affects their bottom lines and how the industry will deal with perhaps its greatest challenge—finding the next generation of leaders. "Exploring Your Management Methods" on page 38 explores three styles of leadership: The Boss, The Inspirational Leader and The Millennial Leader. Following these styles, we learn how each offer their own advantages and drawbacks.

In a new webinar event later this month, we've partnered with GPS Insight to bring you "How to Combat Distracted Driving." Whether it's by a cellphone or something on the road, drivers can easily become distracted from their main focus: driving. In those split seconds, anything can happen. Join us to learn about a better approach to improving fleet safety, using GPS tracking and in-cab cameras to correct driver behavior. The webinar will be held Sept. 20, 2018, and registration is free at constructionbusinessowner.com/webinars

Last but not least, turn to page 52 to check out our redesigned product section, "New Products to Watch." The new look gives readers more products and better quality information, making it easier find out what you need to know about the latest gear, solutions and industry-leading innovations. Email me at kwells@cahabamedia.com to let us know what you think!

Take good care,

Kathy Wells

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SEPTEMBER



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AIA Contract Documents

Real projects start with the Industry Standard

Before they broke ground, Eskew+Dumez+Ripple ensured the 2016 renovation of the **Ace Hotel New Orleans** was protected with AIA contracts.

AIA Contract Documents used: A101-Owner/Contractor-Stipulated Sum, A201-General Conditions, B101-Owner/Architect, C106-Digital Data Licensing, C401-Architect/Consultant plus associated administrative G-forms.

Learn more about the Ace Hotel project at aiacontracts.org/cbo



Photography ©Timothy Hursley

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The Autodesk Forge Fund Leads Rhumbix's $8M Funding Round

Rhumbix, a mobile platform designed for smarter construction sites, has closed an $8-million round of funding led by Autodesk Inc., maker of cloud-based construction project management software connecting teams and data from design through construction. Rhumbix helps builders go paperless in the field and improves how they measure and manage labor productivity. "The Autodesk Forge Fund invested in six construction technology startups in the last year, including Rhumbix, and each of these investments demonstrates our commitment to provide customers a more connected, productive and profitable construction process," said Jim Lynch, vice president of construction products, Autodesk. Autodesk Forge is a connected developer cloud platform enabling customers to create customized, scalable solutions for engineering, construction and manufacturing challenges. The Rhumbix platform, has delivered ROIs ranging from 500 to 800 percent by helping to eliminate the gap between the office and field via real-time data sharing. Visit rhumbix.com and autodesk.com.

Cosential Secures $34M in Strategic Growth Investment from JMI Equity

Cosential, provider of CRM and proposal automation software for architecture, engineering and construction (AEC) firms, has secured a $34 million strategic growth investment from JMI Equity, a growth equity firm focused on investing in leading software companies. The funding will be used to accelerate market development, expand corporate infrastructure and continue fueling the company's rapid pace of product innovation. Cosential's cloud-based software platform creates a single system of record, purpose-built for the unique, project-based needs of AEC marketing and business development teams. Created by experts with decades of industry-specific experience, Cosential enables firms to quickly and intelligently leverage customer, project and financial data to grow revenue without the need for costly system integration and customization. In connection with the financing, Bob Nye, general partner at JMI, will join Cosential's board of directors. Visit cosential.com.

ABC Supply Co. Inc. Acquires Assets of Alliance Wholesale Supply

Building products distributor ABC Supply Co. Inc. has acquired the assets of Alliance Wholesale Supply, distributor of roofing and other exterior building materials, founded in 2000. The company has one location in Johnstown, Pennsylvania. Current Alliance associates will continue to work at the location, providing an easy transition for current customers. Visit abcsupply.com.

Equipment Leasing & Finance Foundation Releases Q3 Update

After solid growth in 2017, investment in equipment and software should remain strong in 2018 and is projected to expand 7 percent (down from 8.5 percent in the Q2 Economic Outlook published in April), according to the Q3 update to the 2018 Equipment Leasing & Finance U.S. Economic Outlook released by the Equipment Leasing & Finance Foundation. Business investment continues to expand at a robust pace, contributing to a likely strong year for the U.S. economy. Overall, the economy is expected to grow 2.8 percent in 2018 (up from 2.7 percent in the previous outlook, and significantly better than last year's 2.3 percent growth rate). The quarterly report by the foundation, which is focused on the $1 trillion equipment leasing and finance sector, highlights key trends in equipment investment and places them in the context of the broader U.S. economic climate. Highlights from the study include: Capital spending has been solid thus far in 2018, and strengthening economic momentum coupled with elevated business confidence levels should lead to continued investment during the third and fourth quarters. Investment in equipment and software is expected to grow by 7 percent, and financial stress remains low. Credit supply conditions are mixed, as banks are easing standards for commercial and industrial (C&I) and commercial real estate loans while tightening standards for household lending. Solid economic fundamentals suggest the economy could reach the 3 percent annual growth target in 2018, but a stagnant housing market, potential softening in global growth (particularly in emerging markets) and continued upheaval in U.S. trade policy are areas of concern. Overall, the U.S. economy remains on firm footing in 2018, as most major gross domestic product (GDP) components are contributing positively to growth, with the notable exception of housing. The labor market should maintain its strength and drive improvements in consumer spending (which fell far short of expectations in Q1), while business investment should continue to impress. Visit leasefoundation.org.

Hyundai Construction Equipment Americas Adds District Manager to Northeast Region



Bill Klein

Hyundai Construction Equipment Americas Inc. announced the addition of William "Bill" Klein to the sales team. Klein will be responsible for assisting Hyundai dealers across the Northeast region of the U.S. He will report to Tom Owen, vice president of Hyundai national construction equipment sales. Bill joins Hyundai Construction Equipment with more than 25 years of experience in the construction equipment sales industry and has a background in business administration and management. Visit hceamericas.com.

InSite Software Inc. Hires Chief Technology Officer/ Chief Architect



Doug Chasman

InSite Software Inc. has hired Doug Chasman as chief technology officer (CTO) and chief architect. Chasman will play a key role in the development of InSite Software's product suite: InSite SiteWork and Field General Office. Chasman joins InSite Software from Salesforce, where he was the senior vice president of research and development, as well as an engineer. In his 14 years at Salesforce, he was responsible for the architecture and implementation of the Salesforce Platform, Force.com, and invented its user interface framework, VisualForce. He was also the lead architect for Salesforce's next generation application development platform, Lightning, which helped to grow Salesforce to over $10 billion in annual revenue. Chasman has been granted 16 patents for a variety of software innovations. His wealth of experience will be a key role in positioning InSite Software Inc. as a leader in earthwork takeoff and GPS modeling software. Visit insitesoft.com.

John Deere Names Black Forest Volunteer Winner of 'Small Machines. Big Impact.' Contest

Neil Behnke, a volunteer with the nonprofit organization Black Forest Together, was chosen by the public as the grand prize winner of the second annual

John Deere "Small Machines. Big Impact." contest. As the winner, Behnke took home his choice of a new model from the full portfolio of John Deere small-, mid- and large-frame G-Series skid steers and compact track loaders (CTLs), with a WorkSite Pro attachment to help with his project, "Rising Above the Ashes." This project helps residents of Black Forest, Colorado, clear their land of dead, dangerous trees, resulting from the most destructive fire in Colorado's history. The June 11, 2013, fire spread across 14,000 acres in 10 days, destroying more than 500 homes, causing $85 million in damage and claiming two lives. As a result of the overwhelming response to the contest, John Deere also announced that it will help the two runner-up finalists in completing their community projects with a yearlong lease on a skid steer or CTL from John Deere Financial. The runners-up are Kobus Appelgrijn of New Port Richey, Florida, and Anita Will of Ridgefield, Washington. Additionally, all three finalists received a $2,000 stipend to help in the completion of their projects, donated by John Deere and its local dealers. Visit deere.com.

▶ Never Idle Acquires FleetRight

Never Idle LLC, the contractor-to-contractor marketplace, announces the acquisition of FleetRight Inc., which will now operate as Never Idle. Never Idle's mission is to empower contractors by building a heavy equipment marketplace, comprised solely of their peers, where they can rent, buy and sell equipment. Members have access to a fleet of Never Idle Network equipment, broadening their options to meet their equipment needs. Never Idle is already in operation throughout the upper Midwest, with plans to be available nationwide within 2 years. Never Idle offers the industry its first fully managed, contractor-to-contractor rental and sales marketplace, handling all the details, logistics and communication between parties. FleetRight was founded in 2015 by Zach Schreiber as an online community marketplace and auction platform dedicated to contractors buying and selling heavy equipment. "We are empowering contractors to use their assets in the smartest way," Schreiber said. Never Idle founder Terry Dolan said, "Zach and I shared the same vision for our contractor marketplace, so we decided it was best to join forces. Together, our key focus remains supporting contractors who are looking for ways to maximize their return on investment by providing a platform and tools to manage equipment." Visit goneveridlecom.

70 years

Acme Tools marks the start of its seventh decade in business and its evolution from an electric motor repair company to an omnichannel retailer of tools and equipment, with stores in Grand Forks, Bismarck, Fargo, Minot and Williston, North Dakota; Bemidji, Duluth and Plymouth, Minnesota; Cedar Rapids and Des Moines, Iowa; and an authorized online retailer for every major tool and equipment brand. Visit acmetools.com.

▶ The Toro Company Launches 'Land. Water. Thrive.' Initiative

This initiative aims to help improve water-use efficiency, enhance outdoor environments and green spaces and educate on sustainable agricultural practices. Over a 2-year period, The Toro Foundation is contributing up to $1 million in grants to nonprofits in global communities with the Greenspace Enhancement Grant Program. This new program aims to support organizations in their efforts to revitalize parks and green spaces, enrich the outdoors of neighborhoods and schools, educate on the efficient use of water, and support sustainable agriculture through community gardens. For 2018, the Greenspace Enhancement Grant Program will support organizations in the following cities worldwide: Beatrice, Nebraska; Bloomington, Minnesota; El Paso, Texas; Iron Mountain, Michigan; Riverside, California; Sanford, Florida; Shakopee, Minnesota; Windom, Minnesota; Xiamen City, China; Ploiesti, Romania; Spellbrook, United Kingdom. Locations included in the 2019 grant program will be announced at a later date. Visit thetorocompany.com.

▶ Bridgestone Expands Off-the-Road Tire Production in US

Bridgestone Americas (Bridgestone) announced a $12-million investment that will expand production to include popular off-the-road (OTR) tire sizes at its Bloomington, Illinois, plant. The plant will produce multiple sizes and patterns in 29-, 33- and 35-inch OTR tires, which, until now, have only been produced by Bridgestone in Japan. This investment also includes increasing the workforce at the Bloomington plant by 30 employees. The last major investment in the plant was $48 million for a radial and giant loader expansion in 2011 and 2014. The Bloomington, Illinois, plant, owned and operated by Bridgestone Americas Tire Operations, produces OTR tires for mining and construction applications. The plant team has achieved numerous awards and recognitions, including Occupational Safety & Health Administration (OSHA) Voluntary Protection Program (VPP) Star Safety Certification, the U.S. Tire Manufacturers Association's Safety and Health Improvement Award and the Illinois American Legion Employer of the Year for Hiring of Veterans. Visit bridgestoneamericas.com.

▶ Hitachi Construction Machinery Loaders America Inc. Opens New US Corporate Headquarters

Hitachi Construction Machinery Loaders America Inc. (HCMA) has opened its new U.S. corporate headquarters in Newnan, Georgia. The new facility represents a $4-million investment by Hitachi Construction Machinery. The initial phase consists of the new headquarters facility at 12,291 square feet, a new training facility at 3,600 square feet, the training facility offices and administration at 5,084 square feet, and a future storage building at 21,421 square feet. This investment represents the foundation supporting the anticipated market expansion of Hitachi Wheel Loaders in the North American market. HCMA anticipates tripling its market share in the next 5 years. The HCMA team is focused on wheel loaders—and only wheel loaders. Visit hitachicm.us.

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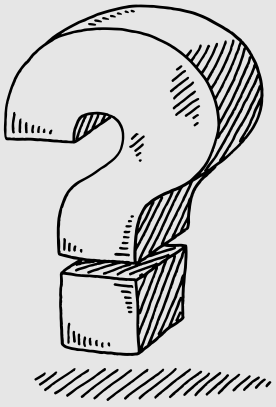
Eye on the Future

What manufacturing trends should business owners be watching?



ALBERT A. CERVERO
Senior Vice President,
Construction, Mining & Utility
AEM Association of Equipment Manufacturers

More manufacturers are incorporating the internet of things (IoT), smart devices and embedded intelligence into their production (and nonproduction) processes and equipment. Experts call this trend of automation and data exchange in manufacturing technologies the next Industrial Revolution. Known as "Industry 4.0," the trend allows companies to use advanced manufacturing capabilities and IT throughout the product life cycle. Next, augmented reality (AR) is changing how people interact with computers. Improving safety and performance with wearable technology devices is just one aspect. Possible manufacturing AR applications include complex assembly, maintenance, expert support, quality assurance and automation. 3D printing, or additive manufacturing, is also gaining acceptance. Companies see the value of these processes for prototyping, tooling and even final production applications to positively affect time and cost efficiencies. Groundbreaking advancements in technology are also propelling manufacturing into a new age of automation. The continued evolution of robotics, machine learning and artificial intelligence are poised to disrupt processes not only on the shop floor, but also in other areas of business, such as maintenance, management and administration.



Do you have a question for our team of experts?

We want to help you get the answers you need to improve your processes and make your business more efficient.

To submit a question, email Associate Editor Rachel Fulford at rfulford@cahabamedia.com.



MAX WINEMILLER
Director of Project Management,
Road Building & Site Prep Division
CASE Construction Equipment

Advanced precision construction technologies continue to proliferate in today's construction market, and many equipment manufacturers have partnered with technology companies in order to offer a widening array of scalable machine control solutions. These partnerships between equipment manufacturers and technology companies provide advanced system setup, calibration and training through their dealer networks, which helps to ensure that contractors are getting the most out of their investments. CASE has developed a universal machine control option for its production class M series dozers that makes each machine factory-compatible with all major suppliers of machine control technology, including Topcon, Trimble and CASE precision partner Leica Geosystems, with a single "universal machine control" option. Machine guidance and control technologies are becoming easier to operate and integrate across fleets of all sizes, and with that comes the possibilities for greater productivity and increased return on investment. While some still think of it as a technology suitable only for large bulldozers and motor graders, many are starting to see it for what it is—a transformative technology for machines of all sizes that can help contractors get to their next jobsite with greater efficiency and profitability.

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Don't Sweat the Wrong Stuff

Where to focus—& not focus—your attention to work smarter & grow bigger



GEORGE HEDLEY, CSP, CPBC, is a professional construction BIZCOACH and industry speaker. He helps contractors build management teams and get their businesses to work for them. He is the best-selling author of "Get Your Construction Business To Always Make A Profit!," available on amazon.com. Email George at gh@hardhatpresentations.com to sign up for his free e-newsletter, start a BIZCOACH program, attend a 2-day BIZ-BUILDER Boot Camp or get a discount at hardhatbizschool.com online university for contractors. Visit hardhatpresentations.com for more information.

Ask George

To submit a question for George Hedley, email Editor Kathy Wells at kwells@cahabamedia.com.

I recently returned from a trip, throughout which I coached clients from four different construction companies. The owners of these companies come from different backgrounds, have different goals for their businesses, employ teams with varying roles and personalities and entertain projects of different sizes. However, during our conversations together, we found there to be one common denominator: They are all busy, but they are all not earning profits at the pace they could be.

WHAT'S NOT WORKING?

These business owners have increased their personal workloads, maintaining more of the day-to-day operations than they should. They have stretched most of their managers and staff beyond their abilities to proactively head up projects and effectively manage field productivity to maximize their profit potential.

Additionally, the company owners take on too much of the workload themselves, including performing estimating and take-offs, supervising, scheduling crews, ordering materials, managing projects, and even preparing the monthly progress payment invoices in their spare time.

One of these clients was so busy that he had a stack of subcontractor bills on his desk he hadn't had time to approve, thus causing subs to not show up when needed.

Another company was estimating their labor costs and then adding 30 percent in additional dollars to cover for their inability to go back and check how many labor hours it was actually taking to complete the work.

Many also had repeat customers who wanted them to build projects, but they couldn't find the time to meet with the customers or provide proposals.

DON'T LOSE FOCUS

Another common problem among the group was that these company owners were not focused on the big picture. Having their own schedules bogged down with small, trivial tasks—instead of managing their companies' bottom lines—forced these owners to lose focus on the future. Constantly handling the minutiae of bookkeeping or correcting change orders (as a project manager should) easily steals critical hours from the workday.

Being too busy costs owners the time, entrepreneurial drive and focus they need to create opportunities for growth and generate the chance to increase profits, cutting their valued leadership in half. Any time this is the case, the business and its teams fall short of reaching their full potential.

FOCUS ON THE END RESULT

Being the owner of a construction business is not about keeping busy, regulating the books and spending, hiring a scarce team of a few people, providing for your family, paying taxes, or any number of other daily concerns facing the business. As the owner of a construction business, you agree to deliver what the customer wants.



I've never met a business owner whose goals are to work more hours, worry about more details, make more decisions or fight for more cash.

Most owners want to build a business that delivers substantial results, including best-in-class profits, strong business equity and high-margin revenues, because these results deliver the freedom and wealth owners desire before they are too far along in their careers to achieve it. Significant profits and steady growth also allow a company to:

- Build a strong management team
- Win employee buy-in and build a team mentality
- Develop dependable superintendents and foremen
- Generate accurate estimating without missed items
- Implement weekly field job-cost tracking scorecards
- Eliminate profit fade
- Attain on-budget labor production
- Stick to project schedules
- Procure quality workmanship
- Manage change orders proactively
- Reach a safety experience modification rate below 100
- Obtain high-margin, loyal customers
- Make investments that provide passive monthly income

No business owner gets rich handling the little things that don't deliver big results. Spending your time focused on the following will allow your company to achieve the results you want:

- Winning the work instead of actually doing the work
- Finding reliable employees instead of coping with underachievers
- Meeting with potential customers instead of negotiating with suppliers
- Implementing an accurate job-cost system instead of scheduling crews
- Coaching emerging leaders instead of managing everyone yourself

When you're focused on tying up all the small tasks, the big-picture items fall to the wayside. Overworked business owners tend to do too much themselves, as they often don't trust others with big decisions.

Wealthy business owners who focus on the top priorities have a team of accountable managers dedicated to winning the right work, operating the business profitably and providing excellent financial management, which delivers results and allows them to enjoy their success.

PRIORITIZE CAREFULLY

During our strategic coaching session, the aforementioned four companies identified over 100 company aspects they would like to improve or eliminate during the next 12 months. Next, they prioritized the most important items that would make the biggest impacts on company results. These items then became goals for the upcoming year. Finally, we determined which three items would be their top priorities. Almost always, the same priorities appear at the tops of these lists, such as:

- Increase net profits to reach best-in-class level
- Develop a strong management team
- Eliminate profit margin fade from bid to final job cost
- Develop a job-cost tracking system to ensure accurate labor production rates
- Generate accurate estimates without missed items
- Develop accurate and timely accounting and financial reporting systems
- Chart organizational structure with a chain of command, levels of authority and written job descriptions
- Fill empty positions with reliable employees
- Develop a proactive marketing and sales strategy
- Start a wealth-building investment program

If you have more than three top priorities, then you have too many. Companies that focus on a few priorities improve their bottom lines quickly and achieve results. These priorities can make or break your business. Select your top three, and start developing and implementing action plans to make them a reality. **CBO**

Digging Deeper for a Long-Term Solution

Using root cause analysis to solve the common problems plaguing your teams



GREGG M. SCHOPPMAN is a consultant with FMI Corporation, management consultants and investment bankers for the construction industry. Schoppman specializes in the areas of productivity and project management. He also leads FMI's project management consulting practice. Prior to joining FMI, Schoppman served as a senior project manager for a general contracting firm in central Florida. He has completed complex construction projects in the medical, pharmaceutical, office, heavy civil, industrial, manufacturing and multifamily markets. He holds a bachelor's degree and master's degree in civil engineering, as well as a Master's of Business Administration. Schoppman has expertise in numerous contract delivery methods, as well as knowledge of many geographical markets. Visit fminet.com or contact Schoppman by email at gschoppman@fminet.com.

Leaders are usually quick to act. However, without careful examination of a problem, leaders often make decisions that simply treat a symptom, rather than address the true cause of an issue. Great leaders don't make decisions based on superficial information; instead, they dig deep enough to provide real, problem-solving solutions.

SHOP & YARD SUPPORT

The situation: "Our yard manager is weak. He never gets us the materials and equipment when we need it." When faced with this information, the quick decision would be to find a new equipment manager—problem solved. Or is it? Digging deeper on one of the most common issues within construction companies will expose a more insidious root cause. Consider your supervision—how many calls to the equipment manager occur daily? Better yet, how many calls would be constituted as emergency calls? Table 1 depicts an alarming phenomenon. During a 7-week span, the ratio of calls reflected was, at worst, 22 to 1 of emergencies to planned calls and, at best, 4 to 1. Emergencies in the construction industry are commonplace, and that likely won't change. However, they often become the rule rather than the exception. Too often, reactionary behaviors take priority over proactive planning. Costs associated with emergency deliveries, quick shipments, last-minute rentals and lost productivity can quickly erode margins. The knee-jerk reaction is to cast blame on the equipment manager, when the real culpability lies in the reactive behavior of the field leaders.

COLLECTIONS

The situation: "Our controller/CFO isn't doing a great job. Our collections are out of whack." This is a classic case of shooting the messenger. For many organizations, the finance department is the last bastion of money management. The reality is that many of the issues concerning timely collection fall on the operations team. Who is closest to the project? Who influences the invoicing process? Who handles those pesky change orders that often snarl collections? Accounting may have a stake in the process, but if the managers are hands off, no one is truly managing the money.

COST OVERRUNS: PART 1

The situation: "Our estimating is horrible. We always bust the budget." The fault here lies with more than just the estimator. For instance, if estimating does not receive adequate feedback on projects through some sort of post-job review, how can they be expected to learn from any mistakes? Do project teams close the loop on all project costs, including items that may have impacted costs (items they beat the budget on, but estimating never hears about)? Do estimators have a true understanding of the issues related to cost-to-complete exercises? These sometimes look like works of fiction, as they are often

Week	Planned Calls	Emergency Calls	Emergency to Planned Ratio
1	5	35	7:1
2	10	50	5:1
3	10	80	8:1
4	2	44	22:1
5	5	25	5:1
6	7	28	4:1
7	5	35	7:1

Table 1.

the result of project managers manipulating cost codes. Ultimately, complications in the estimating process stem from a lack of job-cost integrity across the company.

COST OVERRUNS: PART 2

The situation: "We cannot make money on [insert phase code here]. Maybe we should get out of that business." This is a profound business decision—where to play and when to exit. However, consider this scenario: A drywall company has three labor cost codes—framing, drywall and finishing. A superintendent charges time to the framing code, only to realize they are over budget in that category. So, the superintendent moves the time to the drywall code but overruns that budget as well.

Finally, after entering the finishing stage and subsequently exceeding that budget, the company deduces that it is a poor finishing company. The firm may actually be strong at finishing, but the cost reports show otherwise. First, ask why a superintendent would charge time inappropriately. Is it ego? Is it to avoid an awkward conversation or a write-up? Examine the root cause first. Once determined, leaders can then make more informed decisions on what trades, niches or markets in which they truly have a competitive advantage.

COMPENSATION DISCUSSIONS

The situation: "We must not be paying our people enough because they keep leaving." Compensation is a tricky game that seemingly never has a strong solution. However, don't assume that compensation is the real reason behind employee flight. Most often, people leave companies because their relationships with their immediate supervisor and the office culture are lacking. Many employees will work for less when they are surrounded by a strong team that has a positive culture. There is no question that some individuals are monetarily motivated, but it would be faulty to view everyone through this same lens. An organization can spend a great deal of money on this problem, only to find that the problem is toxic company culture.

THE BEST CUSTOMER

The situation: "They are our best customer. We've worked for them for years, and they give us all of their work. Yet, we never make any money." Rather than looking at the share of the customer's wallet, look at why they are selecting your business. If the answer is because you offer the lowest bids, you might have correctly correlated your success rate to your declining margins. Many customers will accept mediocrity, especially if they have budgetary considerations. If they see no additional value, the only equalizer is cost. A company not routinely examining their estimating versus actual costs on a client, niche and market basis could essentially be providing free work. Ensure that you are being selected for the right reasons.

Decision making is not easy, and in a sea of data, it is tough to stay informed when business is moving quickly. Senior leaders must take stock in their strategies and avoid these status quo responses. Without discernment, it is easy to operate under clouded judgment. CBO



Business Leaders Are Educators Too

Investing in continued training pays off with long-term growth



HOWARD LEWINTER is a business strategist and advisor to CEOs, presidents and business owners throughout the United States. For more than 25 years, Lewinter has advised businesses from start-ups to privately held corporations coast to coast. Businesspeople use Lewinter's advice to solve problems—from daily decisions to once-in-a-lifetime opportunities. He helps business owners define their personal management style, solve business problems and issues, improve results and profits and experience less stress while achieving more success. Visit talkbusinesswithhoward.com.

There is always much discussion surrounding education, beginning with preschool and spanning all the way through the post-college years. And the question is always the same: How do we improve the quality of education to better prepare everyone to find their talents and equip them with the knowledge to excel.? As a CEO, president or business owner, candidates' education levels are often a major consideration during the hiring process. But education doesn't stop with high school or college graduation; it requires an ongoing pursuit of excellence and productivity at work.

Every employee you hire has a different educational experience and varied expectations regarding work, so their motivations will differ as well. During the hiring process, consider how you would educate and motivate each potential employee. Never assume an employee already knows all they need to know to do their job well. Employees require education and training on company culture and expectations, including:

- Origins of the company
- Mission statement and reasons for being in business
- Policies and procedures
- Sales processes
- Customer service
- Marketing programs
- Products and services
- Any updates or changes in products, services, policies and processes

PUT YOURSELF IN THEIR SHOES

When it comes to your workforce, one size does not fit all. That's why investing in the education of your employees pays off with long-term growth, success and profit. But it will require time, effort and thought on your part. Complete an overview of your employees, both individually and by department. Determine what role, frequency and interaction you will have, whether directly or indirectly. Which employees can coach or mentor others to maximize success?

Remember: It's not just new employees who need the attention; it's also those who have been with the company for a while, perhaps even years. Everyone needs continued training and education to be productive, grow in their roles and enjoy their work. Training and education will help with the retention of employees, reducing costs and lowering turnover rates—all beneficial to the reputation of the company and its profits.

When deciding how best to educate your staff, ask yourself what skills they have and lack; what they need to understand better; how you will involve everyone individually and as a team to improve their work; and how you can achieve a better, more profitable company.

When you think about what every employee needs to be productive and successful, consider the individual, as well as the job title and the experience they have. People don't become dissatisfied with their jobs primarily because of money. Though

compensation definitely can play a role, it isn't always the primary factor. Consider the following employee desires:

- To feel part of something
- To contribute in a meaningful way and see the results of their work
- To enjoy what they do and feel confident that they are doing a good job
- To feel valued by their employer

When employees (and, therefore, the company) are doing well and meeting or exceeding profit goals, you will be able to increase paychecks—a favorable outcome for everyone.



BE AN EMPLOYEE EDUCATOR

Successful business leaders are daily educators, leading by example from the moment they drive into the office parking lot or project meeting location. As such, always encourage employees to further their business education, which puts your company at the forefront of the industry, solidifies the company's reputation and demonstrates your committed investment to the professional development of your employees. Some other methods to further education in the workplace include:

- Post important information on centrally located bulletin boards
- Send out a company newsletter
- Engage in employee recognition
- Offer online training courses
- Purchase office subscriptions to trade publications
- Attend motivational speeches
- Encourage and attendance at outside seminars
- Provide employees with relevant, best-selling or newly published materials
- Fund continuing education scholarships
- Take time during business hours to talk with employees about what they are working on and how they feel their progress is going

As a business leader, the key is to be consistent, creative and willing to tailor your teaching methods to the needs of your employees. For example, a salesperson may not need to understand or know the same things as a construction worker. The administrative personnel in the front office may need information on how to improve communication with the sales team or engineering department so that there is a better flow with reports.

BE A BUSINESS STUDENT

Though there are opportunities for entrepreneurial studies at a growing list of colleges, they alone cannot fully prepare you for your role as a CEO, president or business owner. Being a student of business continues throughout your life and career. If you are not continually learning to further benefit the company, then how can you expect those who work with you to be open to learning? Operate under the belief that learning never stops, in ways such as:

- Holding seminars
- Surrounding yourself with experts
- Joining networking associations
- Reading business and industry literature
- Working with a mentor or consultant
- Observing other companies and leaders you admire
- Learning from mistakes by enacting plans/processes to avoid repetition
- Working side-by-side with employees in each department

It's important that, in addition to educating yourself and your employees, you are also always educating your current and potential clients. Education is part of the ongoing sales, marketing and customer service cycle as well.

KNOW THAT IT'S WORTH IT

Making a commitment to be an educator in addition to the other hats you wear may seem overwhelming, and you might think it takes up too much time. But leaders who make the commitment will see the decision pay off in long-term success.

Every company is different, and your needs may not mirror your competitors'. It all starts with educating yourself, which enables you and your staff to understand how to be successful. It's important to gain the necessary information to help not only your employees and clients, but also the company to be more profitable. CBO

What Do We Do Now?

How GPS tracking can help your business recover from equipment theft

BY JENNY SHINER

As a contractor, there is no worse feeling than arriving at a jobsite only to realize expensive equipment has vanished. Low recovery rates make stolen equipment a huge financial challenge, and without a source of asset protection or a recovery method, construction businesses are often left asking, "What now?"

According to the National Equipment Register (NER), the No. 1 factor that contributes to the low recovery rate of stolen equipment is "delays in the discovery of thefts and subsequent delays between the time of the occurrence and reporting [to authorities]." That's why many contractors are turning to GPS tracking technology to enhance their virtual security and surveillance on jobsites, notify management as soon as theft occurs, and provide real-time equipment locations to authorities.



PRIME TARGETS

The NER lists two factors that determine the type of equipment thieves are most likely to take: value and mobility. While value is the primary factor, if the equipment is too large to be moved onto a small trailer, then it's less likely to be a target. Some heavy equipment pieces that are frequently targeted include backhoe loaders, wheel loaders, skid steers, air compressors, welders and light towers. Unfortunately, there is no guaranteed method of prevention. As long as there is a profit to be made from these assets and limited law enforcement resources that are dedicated to equipment investigations, thieves will attempt to steal. But, as technology advances, contractors can enhance security protocols to help the equipment recovery process.

GPS tracking technology is helping to solve the problem of low recovery rates by providing immediate awareness of theft to contractors and enabling the ability to track the exact whereabouts of the stolen property. By setting up the right alerts and using real-time mapping capabilities, contractors are able to be proactive and work to recover stolen property as soon as possible.

GPS TRACKING ALERTS

These alerts notify management and drivers of a situation that requires immediate attention. To monitor theft in real time, specific alerts will inform contractors if equipment is moving when or where it shouldn't be.

- *Odd hours alert*—This allows contractors to monitor equipment activity outside working hours. By setting custom

times that equipment is not used for work, contractors are able to monitor activity exceptions. For example, a movement alert in the middle of the night is an indication of theft, and a contractor can act right away to increase his chances of recovery.

- *Landmark alert*—By creating a geofence around a jobsite, a contractor receives an alert any time equipment leaves. This is beneficial for equipment that should remain on-site. For example, a generator that has left the jobsite when it's scheduled to be there another month will trigger an alert.

When theft does occur, contractors can access the equipment's current location through the GPS system's mapping tool. Real-time mapping is important because it allows contractors to report the exact location of the stolen equipment to authorities, greatly increasing the chances of recovering stolen equipment.

THE IMPACT

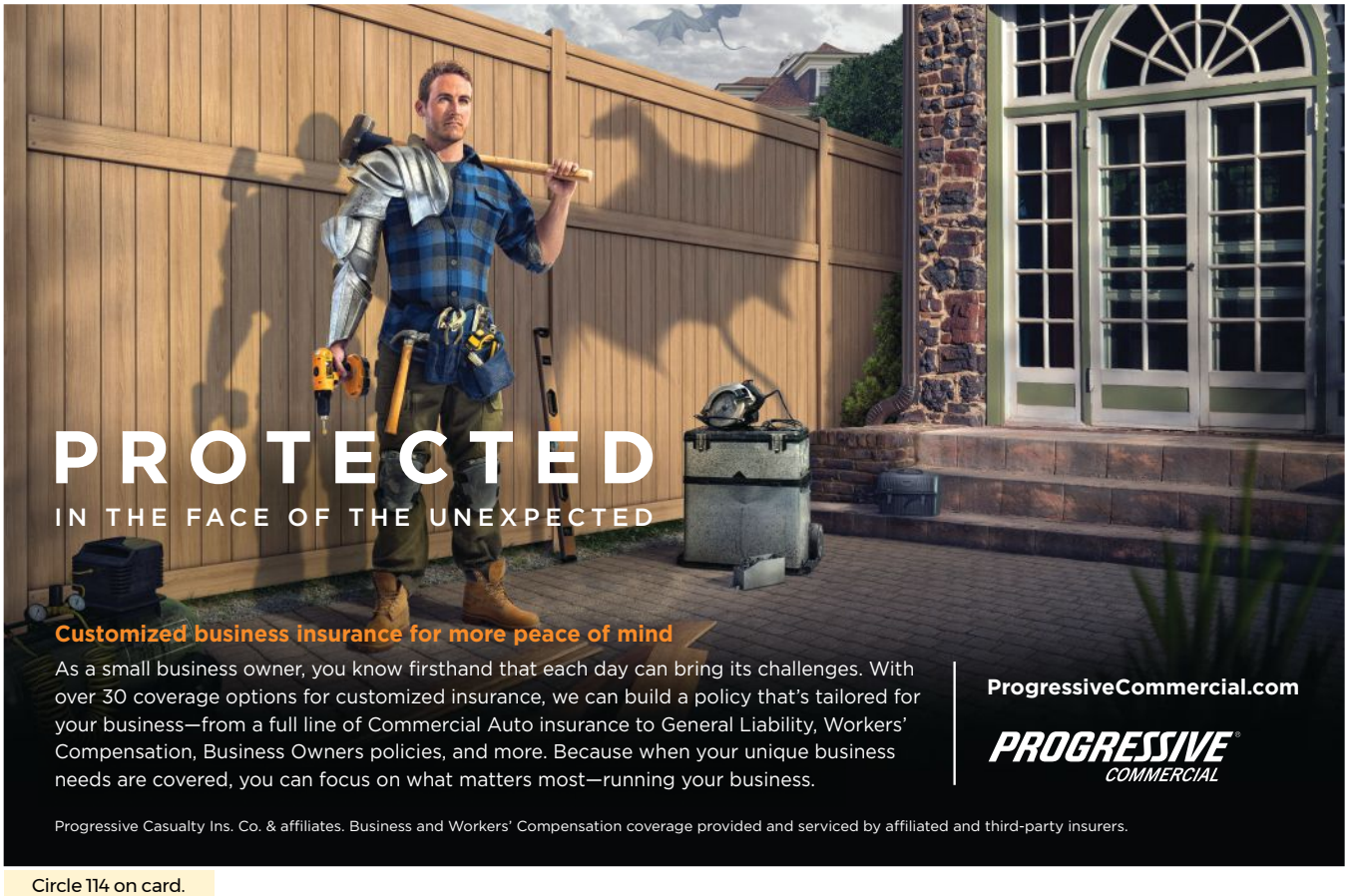
According to the National Insurance Crime Bureau, losses due to equipment theft in the construction industry varies from $300 million to $1 billion annually. Many construction businesses are, regrettably, part of this statistic, but more and more contractors are managing to recover their equipment or other property with the help of GPS tracking technology.

Culy Contracting, a water and sewer construction business located in Winchester, Indiana, experienced a near-theft of multiple vehicles, trailers and equipment in one incident. According to Stephen Hinkle of Culy, GPS tracking alerted one of his drivers with the real-time locations of multiple assets, which were far from where they were scheduled to be. The company immediately contacted authorities and used GPS tracking data to recover all assets, worth $350,000. "Because of the system, our equipment was back in 24 hours," said Hinkle. "Without it, the trucks would have been gone."

As this technology is becoming more commonplace on construction sites, the recovery rates of stolen equipment will increase in coming years. While attempted theft will always continue, contractors can rest assured that their property is much more likely to be returned quickly with the use of GPS tracking technology. **CBO**

Jenny Shiner is the marketing communications manager for GPS Insight. She holds a bachelor's degree in communications from Arizona State University and is responsible for external marketing communication for all business segments that GPS Insight targets. Visit gpsinsight.com.





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10 Ways a Mechanic's Lien Gets You Paid

Exchanging the negative stereotype for the facts that work in your favor

BY SCOTT WOLFE JR.

Most people in the construction industry have heard of the term "mechanic's lien." But if you ask anyone to explain what a lien is, how it works or even how the word is spelled, you will likely learn that their knowledge about mechanic's liens is basic at best. Aside from a general awareness that liens exist, perhaps the only other shared understanding is that liens are unfavorable.

Conceptually, mechanic's liens are not that complicated. The general rule is this: If you take part in a private construction project by furnishing labor, materials, equipment or services that permanently improve the property, then you are entitled to secure that claim by filing a lien against the property—which means that the property itself can be sold to pay you what you're owed. Most public construction projects, however, are typically not covered by mechanic's liens. The bond claim process is generally used instead.



THEORY VS. PRACTICE

Liens sound pretty simple, right? Why, then, is there so much confusion surrounding them? The short answer is that, because liens are so powerful, they are tightly regulated by a number of complicated requirements and rules about deadlines, notices, language, processes and much more that must be strictly followed. And here's the kicker: Each state's lien laws are different. That means that the mechanic's lien process for a California-based construction project is completely different from that of a project located in Texas.

SECURING PAYMENTS

Despite the complications involved with the process—and even though the circumstances for each project are different—the fact remains that mechanic's liens are generally quite effective at getting claimants paid. The following are 10 ways that mechanic's liens work for the advantage of the business owner's bottom line.

1. *Creates the leverage needed to speed up payment conversations*—This is perhaps the most important aspect of a mechanic's lien. The truth is, no one goes into a new project hoping to file a lien. Filing is bad for everyone involved and is to be avoided at all costs. However, the fact that this powerful and unique right exists for the construction industry means that there is a proven method that helps to get



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parties to the table in attempt to work out payment disputes.

2. *Encumbers the property, not the person*—A mechanic's lien attaches to the underlying property being improved upon during the course of the construction project. This means that the property itself becomes the security for the debt to be paid. When you file a mechanic's lien, the document is actually recorded with land records and appears on a title search of the property.
3. *Remains good through bankruptcy*—While declaring bankruptcy can help to discharge personal or business debts and obligations, it won't remove a mechanic's lien because it is attached to the property. It's complicated, but generally, a mechanic's lien allows any individual party's money trouble to be avoided
4. *Gets the attention of the lender*—Lenders control the disbursement of money to the project and don't want to see anything disrupt that flow. Lenders have a security interest in the property (the mortgage) to avoid nonpayment and are sensitive to any matter that may indicate trouble on the project or that may devalue their own protection. In some states, a lien can actually take priority over the lender's interest. This is a big deal to lenders, and they usually step in to demand action after a mechanic's lien is filed.
5. *Sets a firm deadline for payment*—Sometimes, the issue isn't whether or not you are going to get paid, but when. It takes longer to get paid in the construction business than in just about any other industry. Filing a mechanic's lien is helpful in this scenario because it sets a firm deadline for resolution of your claim.
6. *Speeds up payment discussions and helps to avoid other complicating issues*—Construction projects are incredibly complex endeavors with many different participants, challenging conditions and moving parts. As such, payment issues on construction projects are no less complicated. However, other disputes that contribute to payment issues (such as workmanship) generally cannot prevent the filing of a mechanic's lien, even if those disputes are later proven valid. Therefore, a mechanic's lien cuts to the chase and separates the underlying payment issue from other complicating factors.
7. *Is difficult and expensive to challenge*—Mechanic's liens are a powerful tool and represent a significant legal right, codified by laws that exist in all 50 states. Therefore, it's not easy for a lien defendant to simply do away with the issue.
8. *Escalates the payment issue without having to immediately file a lawsuit*—In nearly every state, filing a mechanic's lien is not equal to filing a lawsuit. A lawsuit comes later, through a lien enforcement/foreclosure action. A lien filing is a serious step, but it still gives parties one last chance to work out the dispute without having to resort to expensive, time-consuming litigation.
9. *Entitles you to attorneys' fees and other costs*—If a lien claim does progress to a lawsuit (a lien enforcement or foreclosure action), most states have statutes that allow you to collect attorneys' fees and other costs in addition to the original lien claim. This makes it riskier for property owners and others on the project to dispute your debt. If they do refuse to pay, every day that they delay payment subjects them to more expense.
10. *Prompts payment*—There is a document called a Notice of Intent to Lien that can be sent prior to actually filing a mechanic's lien. Sending this document is actually a good-faith effort by the claimant to bring the parties together to work out the issue before resorting to a lien. Just the credible possibility of a lien is usually enough to garner payment without ever having to actually file.

AVOIDING LIENS

The majority of the construction industry actually has it right when it comes to liens. That is, liens are an undesirable project outcome. Once a project gets to the point that a lien has been filed, something in the payment chain has broken, and something on the project has gone wrong.

It's not fair to blame the lien claimant outright—being on the wrong end of an unresolved payment issue is a terrible place to find yourself. With tight margins and cash-flow challenges that are endemic to the construction business, just one payment issue can endanger the survival of even the best-run company.

It's not fair to automatically blame the paying party, either. In fact, most payment issues are not the result of deliberately punitive measures, willful negligence or any other type of untoward behavior. Often, payment issues are the result of unintentional miscommunication between parties on a project, and not of the intentional bad behavior of any one project participant. The best way to avoid liens is to prevent payment issues from occurring in the first place. And the way to do that is by improving project communication and increasing stakeholder visibility. **CBO**

Scott Wolfe Jr. founded zlien to even the construction playing field and make payments easier, faster and more predictable. Headquartered in New Orleans, zlien now has more than 100 employees and is used nationwide by contractors and suppliers. Recognized by New Orleans City Business as an "Innovator of the Year" and part of the "Leadership in Law Hall of Fame," Wolfe and zlien have been on the Silicon Bayou 100 list since 2014. Wolfe is a graduate of Southern Methodist University and Loyola University New Orleans College of Law. Contact Wolfe at scott@zlien.com or 866-720-5436. Visit zlien.com.



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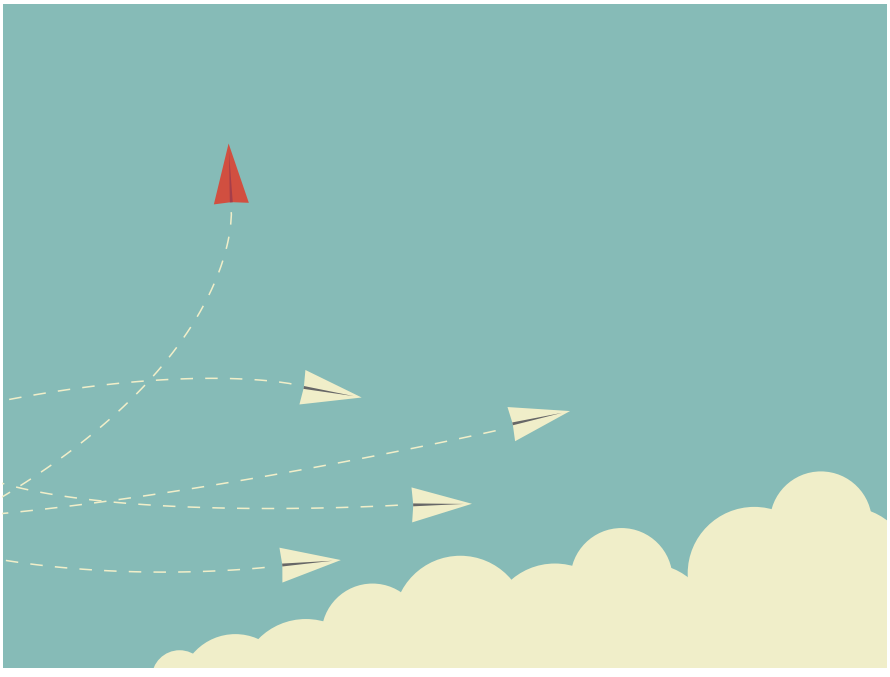
3 Mistakes that Could Derail Your Business Transition Plan

What to avoid when working toward your next career phase or retirement

BY ANDREW BARNINGER

For most construction business owners, the sale of the company is the largest and most impactful transaction of their lives. The proceeds will likely be the main funding source for the next phase of their lives and provide financial freedom for them and their families.

While every business owner has different goals and objectives when it comes to transitioning out of their companies, there are plenty of common challenges along the way. Retiring owners can put themselves, their families and their businesses in a better position to succeed by avoiding a few common mistakes.



1. WAITING TOO LONG TO PLAN

If there is a kryptonite to the entire transition planning process, it is most certainly time. More specifically, a lack of sufficient time. An appropriate amount of time to plan for and execute a well-defined transition process is the gateway to success. There are innumerable challenges to an owner leaving the business; that is why so many businesses fail to transition successfully.

Why, then, do many owners aspiring for retirement provide themselves and their advisory teams so little time to plan for the future? The answer likely lies somewhere between being unfamiliar with the planning process and being too busy to think about it. So, let's take this opportunity to review exactly why adequate time is so important to this part of the process.

- *You need time to fully explore and evaluate your transition goals*—What is most important to you? What does this process need to provide for you and your family? Are you ready to stop working entirely or simply step away from ownership?
- *You need time to fully explore various exit paths*—Do you plan to sell the business to a co-owner, key employee(s) or a family member? If so, you must examine how the deal will be funded and if the next generation is a good fit to lead the business. If you plan to sell to a third party, you must evaluate whether your business is marketable to a professional buyer or competitor. Your advisory team needs time to help you fully research and analyze your desired or ideal pathway to give you the best chance at receiving maximum value.
- *You need time to complete a financial needs analysis*—For many owners,

there is one major unknown that drives uncertainty, stress and, inevitably, procrastination: How much money do I need from the sale of the business? This is the exact question that the financial needs analysis is designed to answer. This calculation takes a deep dive into such breakdowns as lifestyle spending, assets outside the business, income, debts, Social Security benefits and estate planning. Once completed, you will have a clear picture of how much money you need from the proceeds of the business sale. Your financial planner, certified public accountant (CPA), attorney and the rest of your advisory team can then continue executing the transition plan with these figures in mind.

- *You need time to build the value of the business, if necessary*—It may seem counterintuitive to discuss building your business during the transition process, but it is imperative. The last thing that many owners want to do when considering retirement is invest more time, effort and money into the business. However, consider the following scenario. After a thorough financial needs analysis, it is projected that you will need at least $3 million from the sale, after taxes and expenses. Wisely, you hire a business valuation expert who calculates the value at $2.3 million, if sold today. What do you do? Sell it anyway and hope for the best? Reduce your retirement lifestyle and spending? Toss your transition goals out the window and continue working for an unspecified number of years? Fortunately, there is an alternative—you can increase the value of the business, but this can only be done with ample time to execute an efficient plan. A few examples of how this can be done include improving sales, profits and cash flow; restructuring company leadership and management; diversifying customer base, building efficient systems for sales, training, recruiting, billing, quality control, reporting, etc.; completing a comprehensive audit of the company financials and improving weaknesses in financial controls; creating a realistic growth strategy for the business that doesn't involve you.

2. NEGLECTING BUSINESS HEALTH

Whether you plan to sell the business to a third party or transition it to someone you already employ, you will directly benefit from selling a strong company. Not only does the company need to be healthy, but it also needs to be able to maintain and improve its health without you. Remember, all buyers want to see a business that nearly runs itself, and few are looking to buy themselves a job. Unfortunately, many owners default to the transition process because the business is stagnant or cash flow is unstable.

Reliable and improving cash flow is vital to an internal transition. It is unlikely that your successor has the cash to buy the business from you—most internal sales rely on company profits to buy you out over time. You want as little risk to receiving these checks as possible. This requires you to eliminate as many obstacles for the new owner(s) as you can.

Reliable and improving cash flow is vital to a third-party sale. This is what the buyer is interested in purchasing. All buyers ask, "What am I buying?" The answer should be clear: stable and growing profits.

3. NOT SETTING A TIMELINE

A common challenge that many owners face is fitting the transition planning process into the other demands on their time. This is expected and also why outsourcing much of this work to an advisory team is so valuable. However, even the best team will struggle to hit a moving target. So, one of the very first steps in the process is to solidify your transition objectives and, more specifically, your time frame for leaving the business. Detailed timing objectives, such as the ones listed below, are important for each member of your planning team and for those working within your business.

- Your CPA will need to know your time frame in order to accurately project future cash flows and help with tax planning on the transaction.
- Your financial planner will factor your time frame into the financial needs analysis and future cash flow plan.
- Your attorney will work on legal agreements, business succession strategies and personal estate planning, which all revolve around your particular transition goals.
- Your successor/owner will need an open line of communication with you about the transaction, how it will work, how they will pay and what is expected of him or her.
- Your employees and management team will need to know when to expect changes and what the future of the company may entail for them.

As long as a specific time frame is established early in the process, you and your advisory team will be better positioned to handle any challenges that come your way.

The first step to a successful transition plan is taking the time to lay out detailed and specific goals. What is the time frame? Who is involved? What is important to you about leaving the business? Why now? Answering these questions and communicating early and often with your advisory team will help you to avoid mistakes and maximize the return on your investment in the business. **CBO**

Andrew Barninger, CFP, is a financial planner with Personal Wealth Advisory LLC, located in Lancaster, Pennsylvania. Knowing how important the sale of a business is to an owner's financial future, Barninger guides business owners through a step-by-step process specifically designed to achieve successful business transitions. Visit pwallc.net.



Do You Know Where Your Vehicles Are?

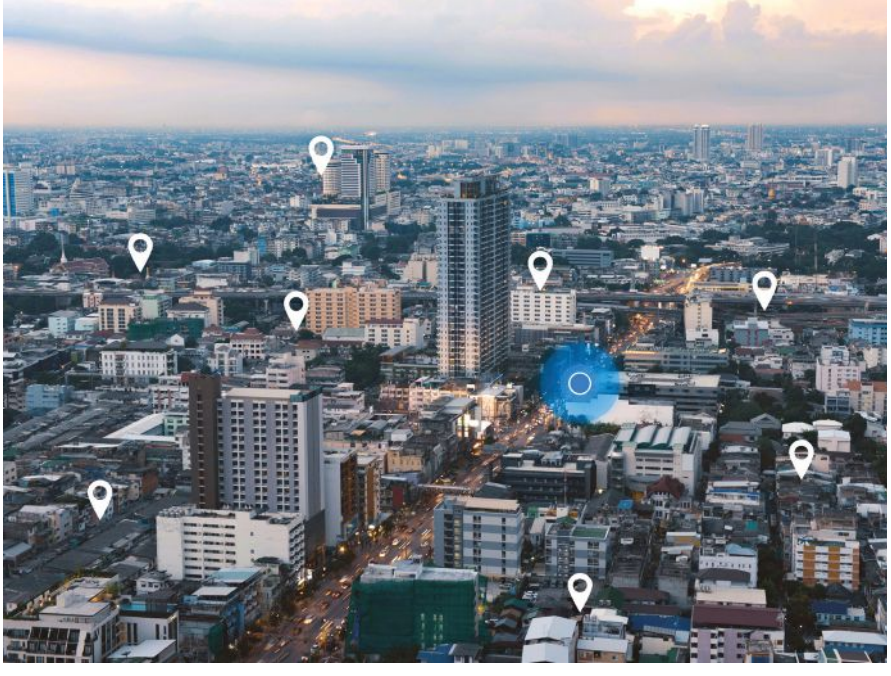
Using fleet management systems to achieve beyond-basic visibility

BY RYAN WINTER

Many midsize general contractors are implementing technology solutions to help them stay competitive and relevant in construction. In today's digital world, the time has come for business owners to realize the benefits that technology brings to automating business processes and allowing field workers to easily access paperwork while on a jobsite and monitor product deliveries. Fleet management and telematics are just a couple example of the technologies that are gaining traction across the industry. These technologies maximize efficiencies in decision making and can differentiate a company from its competitors by providing customers with real-time location information.

For contractors, such solutions can coordinate aggregates-hauling with paving operations, manage fuel usage and track the delivery of equipment to the right jobsite. There are many available solutions, so it is important to understand exactly what each piece of a software suite can do, including aspects such as telematics devices, mobile management and fleet management.

Will Medina, technology manager at FST Sand & Gravel, understands the importance of software and technology adoption. "Software can't stay stagnant. Regular updates continuously optimize our use of the software, helping us to keep our operations running at maximum efficiency."



TELEMATICS

Companies use telematics to improve operations and safety. They can be used to track deliveries, help to optimize routes, track cargo and fleets in real time, and monitor driver behaviors like speeding, following too closely, rapid acceleration and hard braking. Using telematics devices can also reduce insurance premiums while simultaneously reducing collision rates.

Data collected from telematics devices can provide detailed insight into vehicle health, driver performance and areas where fleet operations aren't efficient, as well as help to improve fuel efficiencies by monitoring idling times. If a driver makes frequent stops and leaves the truck running while a delivery is made, the idling engine can eat up fuel. Managers can monitor when a vehicle is stopped or idling and then contact drivers to find out why.

Telematics provides visibility throughout the supply chain, helping businesses to know what their employees are doing, where their equipment is and whether any improvements can be made to operations.

Notre Dame Landmark Restored Under Cover of Darkness

When the sun goes down, the lifts go up at the University of Notre Dame's Main Building. Eight JLG aerial work platforms (AWPs)—six 660SJ and two 860SJ telescopic boom lifts—are enabling workers to restore the exterior of this landmark. It is difficult to overstate the significance of the Main Building to Notre Dame.

Described as the centerpiece of Notre Dame's past and present, the building was constructed in 1879. The five-story structure serves as headquarters for the university administration.

"And that's why restoration work is completed in the evening," said Tony Polotto, senior project manager, facilities design and operations at Notre Dame. "As you can imagine, many important meetings take place behind the walls of this building. Imagine the distractions construction creates. The majority of the work we do here on campus has to happen between May graduation and when students return to campus in August," said Polotto. "We're busy 24 hours a day, seven days a week, so there's no room for equipment failure."

Which is why Polotto appreciates the reliability of the AWPs at work on the Main Building. "Equipment reliability is paramount", he said. "When we only have 10 weeks to complete a project, one day without a piece of equipment is too many."

The JLG 660SJ and 860SJ provide the reach needed to accomplish the job, with platform heights of 67 and 86 feet respectively and a horizontal outreach of 57 and 75 feet. In addition, the jib boom and basket rotate for added functionality.

"The compact size and extended reach of these machines is really important to us," said Polotto. "The articulating jib allows us to access areas that might otherwise be difficult to reach."

As a result, Polotto says the university rarely uses scaffolding. "Scaffolding is expensive, time-consuming and typically damages landscaping. With lifts, we can be in and out quickly, leaving the landscaping as we found it."

According to Polotto, lifts also allow the splendor of Notre Dame to take center stage. "A lot of people visit this campus, so it's important to not conceal the beauty of the property. We'd much rather have a lift occupying a small space than scaffolding covering an entire wall."

As Polotto's crew works on the Main Building, they are scattered around the structure, completing various tasks. When it's time to clean and paint, work will flow from the top down. Some workers rely on power tools, making the lifts' onboard generators a real benefit to productivity by helping to keep tool batteries charged.



The SkyPower generator, available as an accessory to JLG boom lifts, provides 7,500W of 110V or 220V AC power at the platform. A power cable and an air/water line are routed from the base-mounted generator through the boom power track to an outlet in the platform.

Polotto is pleased with the equipment at work, as are the workers who are using it.

"They tell me they like the lifts because they're easy to use, intuitive and safe," said Polotto.

To read more case studies from JLG, visit jlg.com/directaccess.

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There are a variety of telematics devices that collect different types of usable data:

- *Engine control module*—measures speed and brake use, reads odometers, monitors engine diagnostics
- *GPS tracking*—locates vehicles (and their speed) relative to geofence information at any point in time
- *Video camera*—relays driver behavior and reaction prior to and after an incident, monitors road conditions and the behavior of nearby vehicles
- *Advanced driver assistance system*—warns drivers of lane departures and distance from other vehicles or objects
- *Electronic logging device (ELD)*—relays date, time, location information, vehicle miles, engine hours and driver identification

FLEET MANAGEMENT SYSTEMS

Fleet management systems use telematics devices to track the location and status of vehicles in real time. For instance, timing is crucial when delivering concrete. Once water is added to the mix, the chemical reaction starts the clock on how much time is available to transport and deliver the concrete to the job location.

Knowing when trucks arrive, when to queue more trucks and where trucks are in the pour process ensures that the job is done efficiently. This lessens wasted time and keeps employees moving, increasing productivity.

Of his fleet management system, Midwest Concrete IT Manager Mike Sanson says, "Instead of our drivers managing paper and waiting for their next orders from dispatch, they can instantly pull up their next job in the app. It doesn't just make life easier, it's contributing big savings to our bottom line."

Many unproductive hours take place while loading and unloading a truck, sitting in traffic or at a dock and clocking in and out at a jobsite. Anything you can do to cut wasted time in your transportation operation will help to contain costs, as well as keep drivers happy and trucks on the road. Knowing how long it typically takes to load/unload/dwell on-site can help managers drive efficiency and support charges to suppliers and contractors. Fleet management solutions allow for better asset utilization.

The data collected from telematics devices helps to make smarter and faster business decisions. Fleet management systems allow the real-time monitoring of:

- Driver breaks, stops and starts
- Detours from a preplanned route
- Reasons behind route delays
- Unsafe driver behavior
- Truck status
- Customer alerts
- Map locations of trucks
- Hours of service compliance
- In-cab time and attendance

Having visibility into fresh concrete in transit ensures the quality of the mix. During the delivery process, slump is often adjusted visually. Real-time data on a truckload's properties reduces time spent in load adjustments, testing the load and washing out and dumping drum contents. Trucks can then get back on the road faster for optimized utilization. Having a load with the right properties assures quality is met.

If a delivery of products and equipment needs to be rerouted or rescheduled, fleet management systems have tracking capabilities, allowing them to find alternative routes. Many fleet management systems have live map technology that can reduce transit time and fuel usage by providing accurate, optimal routing based on traffic, weather and road conditions.

OSCO & ITS PATH TO ACHIEVING VISIBILITY

Ocean Steel & Construction Company (OSCO) has been in operation since 1955, with operations in ready-mix concrete, aggregates and construction materials. Their commitment to customers and product quality is a big reason they have been in business for over 60 years.

During those years, OSCO has implemented several innovations to maximize results and enhance their relationships with customers.

One of their biggest challenges was knowing where their trucks were and when they could expect them back. They were unable to tell their customers with any degree of accuracy when they could expect a truck. Truck tracking and in-cab telematics provided the solution, enabling them to plan more efficiently.

According to Tracy Dobson, operations and dispatch manager for OSCO, "The software allowed us to schedule our workload and accurately predict when a truck would arrive on a jobsite or return to the plant. It gave us the necessary tools to plan our day ahead instead of flying by the seat of our pants. It more than paid for itself within the first year of use."

Construction equipment is expensive and must follow strict maintenance. Telematics devices help contractors to proactively maintain their vehicles by tracking mileage and engine hours through maintenance schedules with service reminders, which reduce vehicle downtime.

Some construction equipment can be subject to government mandates. ELDs measure a driver's time and mileage to ensure truck drivers are staying within their hours-of-service requirements. Relieving drivers from the burden of paperwork allows them more time in the field.

Fleet management solutions ensure construction projects are better managed from beginning to end, providing a competitive advantage while improving profits. **CBO**

Ryan Winter is a 13-year veteran of the building materials industry. He serves as a global technical sales manager at Command Alkon. Command Alkon provides technology solutions for the heavy building materials industry. Visit commandalkon.com.



How to Combat Distracted Driving

Using GPS tracking & in-cab cameras to improve overall fleet safety

CONSTRUCTION BUSINESS OWNER WEBINAR

September 20, 2018
1 p.m. EDT



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- GPS tracking & how it combats unsafe driving
- How companies use GPS tracking and in-cab cameras to create better safety protocols that can reduce accidents and fines

Speakers



Phil Eatman
Director of Commercial Sales
GPS Insight

Phil Eatman has been with GPS Insight for more than 5 years and has been in the telematics industry for over 8 years. He has implemented several hundred units to fleets ranging from small to enterprise level. Eatman manages the commercial business sales team.



Adam Gabardy
Sales Engineer
GPS Insight

Adam Gabardy brings more than 10 years of experience in software implementation and training to the GPS Insight team. His implementation experience, including national rollouts to thousands of locations, provides insight into the finer details of successfully adopting new software. Over the years he has developed strong problem-solving skills that help him identify unique solutions.

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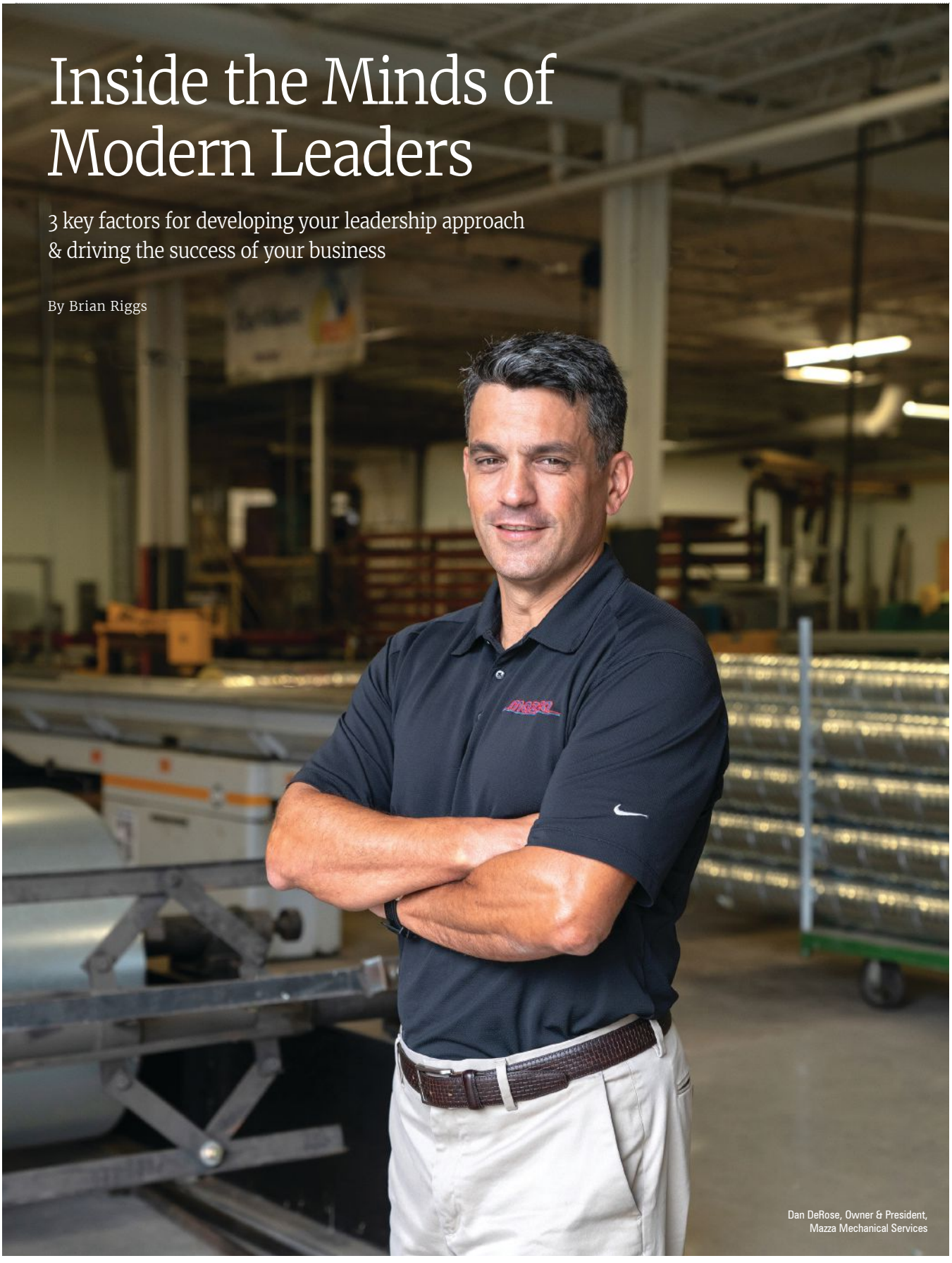
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Inside the Minds of Modern Leaders

3 key factors for developing your leadership approach & driving the success of your business

By Brian Riggs



Dan DeRose, Owner & President, Mazza Mechanical Services

Today's business environment requires a different kind of leader. Changing dynamics within internal environments and external landscapes are forcing leaders to think and act differently with increasing regularity.

Today's leader is required to be agile, responsive and innovative, collaborative, thoughtful, and capable of thinking outside of the box. To accomplish this is no easy task.

The following will explore how leaders can employ a three-pronged approach to leadership through discipline, networks and mentors, and new frontiers. We will look at how two business owners and one association executive use these tools to improve their leadership skills and work toward common business goals, including:

- Reshaping the way leaders think about leadership
- Shifting company culture and engaging teams
- Driving growth and long-term success

1. DISCIPLINE

Discipline means different things to different people, and not everyone assigns the same meaning to discipline, or subscribes to the same type of discipline. For example, making your bed, exercising, reading, meditating, and skipping breakfast are all types of disciplines that any one of us could subscribe to as part of our daily or weekly routine. However, it would be difficult to find anyone who would argue that employing a certain degree of discipline to a personal leadership style is important.

Deputy Executive of Operations for the American Society of Mechanical Engineers, Elena Gerstmann, is very conscious of what discipline means in her daily life and how time management and discipline intersect within her leadership style.

"My discipline is my focus on time. I am not great at time management, but I am always aware of time … I have six timers in my office," said Gerstmann. "These are inexpensive, sand hourglasses with 30-second, 1-minute, 2-minute, 3-minute, 5-minute and 10-minute intervals. I sometimes use these when I'm on the phone. For example, if I want to kick off a meeting, but want to make sure I don't talk for too long, I may flip over the 2-minute timer. I use them in staff meetings when my team and I go around the room, each person providing their own 2-minute update." Gerstmann says the timers are a constant reminder that time never stops and to always use her time wisely.

For Andy Rodenhiser, owner of Rodenhiser Home Services in Holliston, Massachusetts, his discipline centers on ongoing personal and professional development— a "research and implement" approach.

"I constantly look outside of my industry for ideas and trends in what clients might want and what their expectations might be. I have always turned to trade journals for market intelligence, but now it's also nontraditional news feeds, blogs, TED Talks, and audiobooks," said Rodenhiser. "I also love reading a hard copy of the Harvard business review. The July-August 2018 issue featured an article on developing a 'purpose-driven' organization that was of particular interest," he said.

Rodenhiser points out that it's not always only about reading or listening for new ideas on improvement. "I look for the practical application of what I'm reading, to see how it might apply to what I'm doing as a leader. I also try to be self-aware and cognizant of my biases or fears and seek expert opinions from outsiders and industry professionals for a reality check when I feel unsure." Rodenhiser says his company employs a discipline around experimentation and pushing the envelope. "Those ideas come from an unwavering focus on personal and professional growth, idea generation, and taking calculated risks."

At Mazza Mechanical Services of Olean, New York, discipline at the top is directly connected to advancing the organization's culture. Owner and President Dan DeRose said, "I try to stay out of the weeds and focus on the goals we have set, which can be difficult for me, as I tend to get involved and micromanage."



Andy Rodenhiser, Owner, Rodenhiser Home Services



"I believe the culture is what defines a company, whether you recognize it or not. Without purposeful intent, the culture of a company randomly chooses itself, & this can be dangerous."

DeRose cites that by staying disciplined to stay out of the weeds, and by allowing teams to work within themselves with a high degree of autonomy, he continuously cultivates company culture by honest evaluation and sets an example of living it himself. "I believe the culture is what defines a company, whether you recognize it or not," said DeRose.

"Without purposeful intent, the culture of a company randomly chooses itself and this can be dangerous." DeRose says it took him a long time to realize it, but the culture of his company is more important than any tool, strategy or process that they might create. If the culture is off or left to chance, all of these initiatives are likely doomed to fail.

Identifying and practicing self-discipline is an important factor in modern leadership. These personal practices allow leaders to create structure around their own approaches to leadership and, perhaps more importantly, it provides them with the opportunity to curate their own leadership style. Rodenhiser's research and implement strategy has done well for his business and has led to increased employee engagement, higher traffic and views on the company's YouTube channel, and year-over-year growth.

2. NETWORKS & MENTORS

We live in a connected world—one that affords access to other people in a variety of different ways, and not all of them are driven by technology. Modern leaders must leverage and embrace this opportunity, not only by accessing their networks, but also by engaging in mentor-based relationships that allow them to grow both personally and professionally.

The team at Mazza has learned the importance of cross-industry collaboration. Owners Dan and Ledgie DeRose belong to a peer group within their industry, the importance of which cannot be understated. "It has been priceless. As business owners who are always focused on growing our business within our market, we live in a closed environment with limited exposure to other ways of conducting our





business," said Ledgie DeRose, vice president at Mazza. According to Mazza President Dan DeRose, "The peer group provides us access to a resource of best practices within our industry outside of our competition, as well as verification in many cases, that we are on the correct path. With the peer group, innovation is no longer limited to our own abilities, but instead that of a much larger group that has a similar drive to be great."

For Rodenhiser, relying on a network of mentors helps to shape his approach to leadership. "I have several mentors; some are formal relationships, while others less formalized. I also have an executive coach to help guide me through governance, general business and leadership development issues," Rodenhiser said. "In addition, I work with a strategy development coach. These relationships have a long history, and there is significant trust between us, which allows me to be my authentic self."

Rodenhiser says his network of both formal and informal mentors allows him to address different areas of his leadership style, affording perspective from inside and outside the industry. In addition, this year, Rodenhiser is exploring the possibility of an in-house mentoring program to connect various segments of his leadership with emerging leaders within his company. The goal is to enable cross-generational collaboration, exchange knowledge and learning, and break down cultural silos that may exist within a company. The intentional employment of networks and mentors in shaping leadership styles plays a key role in how leaders actually lead. "It's lonely at the top" rings true for most leaders, but it doesn't have to.

3. NEW FRONTIERS

Several years ago, when life was less complicated, I had an opportunity to drop everything and backpack through Western Africa with a close friend. We spent 31 days traveling and photographing various tribes, regions, cultures and events. That trip left an indelible impression on me and taught me one of the most valuable leadership lessons I've ever learned: If we are not constantly placing ourselves in new, and sometimes uncomfortable, situations, we are inhibiting our growth as individuals and as leaders.

Challenging ourselves and our teams in new and different ways is essential to growth, and one way to challenge ourselves and our team is to continually introduce new experiences that drive individual, organizational and cultural change. Two years ago, the DeRoses traveled with their leadership team to Gettysburg, Pennsylvania, to take part in a leadership challenge. This provided an opportunity for individual growth through collaboration and new perspectives

According to Dan DeRose, "Specifically, it opened my eyes to how critical communication and vision are to the success of any team or mission. As a leader, I realized that I need to share my vision for the company [with my employees], open myself up to accept and seek input from my team, and encourage my managers to do the same with their team(s)." It was at this event that the DeRoses began to define the meaning of success for their company.

While any one leader may use leadership in a number of different contexts across a variety of situations, it is an incredibly personal journey—one that is shaped by experience, intent and those who are closest to you. Following the critical elements to becoming a modern leader can help put you and your teams on a path toward success. As you continue to grow as a leader, consider the ways you can assign discipline to your life, better engage your networks and mentors, and challenge yourself in ways that push the boundaries of leadership as you know it. **CBO**

LEADERSHIP RESOURCES

At the end of the day, no leader can do it alone. Here are a few tools to help you prioritize and organize long- and short-term goals for your business:

- *BestSelf SELF Journal*—Use this journal from bestself.co to keep track of daily activities and appointments
- *The Full Focus Planner by Michael Hyatt*—Designed for high achievers seeking intentional, fulfilling lifestyles, this planner helps leaders keep priorities in clear view and achieve what matters
- *Harvard Business Review's "Creating a Purpose-Driven Organization," by Robert E. Quinn & Anjan V. Thakor (July-August 2018 issue)*—This article offers tips for transforming an organization and finding a higher purpose
- *The Gettysburg Leadership Experience*—A leadership experience that integrates tailored, core learning modules with game-changing case studies to engage leaders and encourage dialog. Learn more at gettysburgleadershipexperience.com.

Brian Riggs is the CEO of the Dialogue Shop, a division of Brian John Riggs Inc., a company that specializes in leadership development, strategic planning, and internal and external communications. Riggs and his team work closely with leadership teams and organizations to develop internal and external goals, change management, and inspire team members to embrace a purpose-driven mindset. Riggs holds a bachelor's degree from the University of North Carolina and a master's degree from Rutgers University. He is also a graduate of Cornell University's change leadership program. Contact Riggs at 856-816-3928 or brian@dialogueshop.com. Visit brianjohnriggs.com and dialogueshop.com.





The Age of Empathy

2 leaders using alternative methods to recruit, engage & retain a better workforce

By Elizabeth Manning

In July, the construction unemployment rate hit 3.4 percent, the lowest monthly figure since January 2000, according to the Bureau of Labor Statistics. At the same time, the industry added 19,000 jobs. It's safe to say the entire industry is feeling the effects of the skilled labor shortage. It's more important than ever that contractors focus on creating an environment that both attracts skilled talent and provides those employees with the benefits and culture necessary to keep them around.

Many contractors now practice empathetic leadership, or the idea that leaders should understand, relate and be sensitive to the needs of customers, colleagues and communities, as a way to increase engagement and satisfaction among the workforce. Read on to find out how two such contractors are using this strategy to build cultures that recruit and retain the best of the best.

THE LEADERSHIP

Wesley Palmisano is the president and chief executive officer (CEO) of Palmisano Contractors. Palmisano was raised by a construction family—his grandfather founded W.J. Palmisano Contractors, a residential construction company, in 1950. His experience working alongside his father and grandfather from a young age, as well as during his collegiate studies, molded both his view of the industry and his long-term career goals.

In 2013, he started Palmisano, which, over a 5-year period, grew into a commercial and civil firm with annual revenues of $100 million, a team of over 100 employees and a portfolio of more than 75 large-scale projects.

"When I decided to start Palmisano, I didn't want to start another firm that did things 'the way they have always been done,'" Palmisano said. "I had a vision of building a better world by cultivating a work culture that fosters forward thinking, a commitment to excellence and a can-do attitude, all while maintaining the spirit of teamwork and togetherness."

Mike Greenawalt is the senior vice president of Rosendin Electric, the largest privately held electrical contractor in the United States. Currently, Rosendin employs approximately 6,000 people and has

Empathetic leadership requires that you take the time to stop & listen to your employees' individual needs. As a leader, empathy should be yet another data-gathering tool in your skill set.

annual revenues of around $2 billion. Of the 6,000 employees on Rosendin's staff, approximately 4,500 to 5,000 of those are field-craft employees. Greenawalt joined Rosendin in 2002 as a division manager overseeing the Southwest region. Over the years, Greenawalt and the team in the Tempe, Arizona, office have grown the location from $5 million to a $140-million-per-year operation.

WHY IT MATTERS

First, let's be clear: Empathy is not always about making people happy or more engaged. Empathetic leadership requires that you take the time to stop and listen to your employees' individual needs. As a leader, empathy should be yet another data-gathering tool in your skill set.

Use it to find out how employees are feeling, what your company is lacking and over delivering on currently. But, finding this information doesn't necessarily mean you need to do what your employees want. From here, the empathetic leader uses his/her past experience, training and plans for the future to either drive progress or take action.

However, examining the parts of the company culture and environment that are lacking is an example of a concrete action you can take to show your team you care about their daily work experience. And in this case, showing empathy can drive solid steps toward a stronger team.

Palmisano references the quote, "Culture eats strategy for breakfast," in discussing how his company views workforce management. "At Palmisano, we intentionally designed the culture with the objective to ingrain it in all we do. A positive culture is the foundation of a good employee experience, and I would say I spend as much time monitoring and iterating our employee-experience initiatives with my team as I do any other critical business function. Our culture can be summed up in one simple phrase: 'Do good work for others.'"

Palmisano said this applies to the team, their clients, the subcontractors the company works with and the surrounding community. All initiatives are started with the goal of adding value to the lives of Palmisano's team members. These initiatives are developed through brainstorming sessions with the leadership team and regular feedback from the entire team via "pulse check" surveys.

There is a quantifiable reason to care about your employees' needs too—if you have a reputation of being a company that cares, people will come to you. Rosendin was originally a public works company that developed a reputation of being rather hard-nosed, Greenawalt said. CEO Tom Sorley came in with the goal of changing the direction of the company toward a people-focused business. "With that change in direction, we have found that the people we want are coming from companies like the one we were previously," said Greenawalt.

CULTURE BY DESIGN

The focus on people should be evident in every facet of the business. In addition to offering an employee stock ownership plan (ESOP) to its team, Rosendin also offers perks like a small reimbursement program for continuing education, appreciation programs to award staff for their hard work and opportunities for time off to go back to school, if needed. "It can be small things too. We bring in food trucks once a month for lunch. On hot days, it can be as simple as going to pick up popsicles for the team," Greenawalt said.

For the past 2 decades, though, one very deliberate approach has benefitted the field-craft employees. In 10 years, Rosendin has quadrupled the size of its training department. Since most field employees are expected to complete Occupational Safety and Health Administration (OSHA) training on their own, Rosendin has created internal programs for it. "We train them at work, so they don't have to look elsewhere to fulfill requirements and study code updates," Greenawalt said.

Because much of the leadership team came from the field, they also understand how difficult it is to do high-quality work without the right tools. As such, Rosendin works with tool suppliers, including Milwaukee, DeWalt and others, to facilitate corporatewide deals. "There is nothing worse than an electrician who costs a lot of money to employ and doesn't have the tool he needs to complete the job," Greenawalt said.

The main purpose of all of these perks and programs, though, is to provide the best working environment possible. According to Greenawalt, competitive pay and benefits are extremely important, but they don't negate paying attention to the day-to-day needs which can make a big difference in employee satisfaction.

THE BUILT ENVIRONMENT

One straightforward approach for increasing employee engagement is to modify or improve your team's environment. "At Palmisano, modifying the built environment was one of its biggest undertakings regarding employee experience," Palmisano said. "We recently moved to a new facility, designed with 'work-life integration' and employee well-being in mind. Long hours are a given in this industry, so we created a space that is enjoyable to be in and promotes wellness in our team members' lives."

The company's new open-office workspaces are designed to promote collaboration and movement. "Phone booth" rooms throughout the workspace offer quiet places when needed. These rooms, as well as the conference rooms, are located in the middle of the office, so the open workspaces can take advantage of as much daylight as possible. Adjustable standing desks, a large break room, Ping-Pong tables and more create a fun work setting that is enjoyable to return to day after day. The company's office space also features a CrossFit gym and a multipurpose exercise room in which instructor-led yoga and CrossFit classes take place.

"The main break room opens up to a large deck with a direct view of the river," Palmisano said. "The team definitely doesn't complain about the locally brewed beer on tap in the breakroom, but these perks are not what defines our culture. They are simply reflections of us taking in feedback and designing a space that will ensure our team knows we care and fosters 'building relationships'—one of our core values."

AN UNCONVENTIONAL RETENTION METHOD

For Rosendin, the company's growth is directly affected by the ability to find experienced electrical tradesmen to travel to the company's many jobsites. Due to the nature of the industry, projects are often a long drive away from workers' homes. Some of the employees drive 45 to 60 miles each day to get to the company's jobsites. That's why Rosendin recently started van pools for workers traveling to jobsites in the Phoenix, Arizona, area.

The idea, in part, came from Greenawalt. "When I was in the field, we received an $11-per-day per diem. A group of guys and I started taking turns driving a big old family van. It became a daily routine—meeting at 4:30 a.m. and heading to work."

So, Greenawalt and the team set about putting together the same type of plan for employees in the Phoenix area. Greenawalt estimates that Rosendin's employees that take part in the ride-share program save around $300 to $400 per month. The company uses the local transit system, Valley Metro, to source the vans.

The company started with its first 9-passenger van about 60 days ago and is adding its third van this week. To coordinate pickups, the team put together a heat map of the Phoenix area using the zip codes of employees' residences.

"Every market we are in is dealing with the same problem," Greenawalt said. "The markets all have urban sprawl and long commutes. I expect our competitors will follow suit—it just makes sense."

The company is currently in its business and strategic planning phases for 2019, and Greenawalt says the ride-share program will be part of the attract and retain strategy, adding, "I'd love to be able to roll this out to all of our locations as a nationwide initiative soon."

According to Greenawalt, the other benefit of the program is the reduction in emissions. The team didn't initially consider this specific upside to the program—it was just focused on alleviating the barriers to doing the employees' daily work.

"We've taken 16 to 20 vehicles off the road in the past couple months, and I expect that number will continue to grow," Greenawalt said. "The biggest impact after helping our people is what we have done for our earth and for the safety of other people on the road."

WHAT NOT TO DO

There are lots of steps you can take to make your company more attractive to new employees. But there are also many ways you can get it wrong. Palmisano said he often sees contractors delegating the responsibility of improving company culture and engagement to one department or individual.

"Intentionally designing a positive culture must begin at the highest level of the organization, and it must be a team effort during the initial design, reinforcement and reiteration," according to Palmisano.

Another negative practice Palmisano said he sees is executing a "one-size-fits-all" engagement strategy, designed without any input from various groups within the organization. This can be prevented by getting thoughts, comments and buy-in from every department of the company.

Whatever you do, make sure your approach is authentic. "Tradespeople are extremely intelligent. They are intuitive, and they will know if you are promoting a strong company culture for the right reasons," Greenawalt said.

And Greenawalt was quick to note that a strong culture and empathetic leadership are long-term investments. "Without your people, you don't have a business," he said. "Find ways to stick through—even in a recession. You may have to reduce your field staff, but you shouldn't reduce what you pay them or what you offer them."

Bottom line: The way you treat your people matters. As a leader, you should care that your employees are not only going home each evening content with the work they have produced, but also satisfied with the environment in which they have produced that work. CBO

Elizabeth Manning is the managing editor of Construction Business Owner magazine.

BEST PRACTICES FOR THE EMPATHETIC LEADER

The following are a few rules to live by from Palmisano:

1. Focus on building a working environment that promotes wellness for your team and encourages a positive company culture.
2. Reinforce that culture internally as much as you would for any other critical business function. A strong company culture requires constant monitoring.
3. Hire the right people. Hire for culture first and job skills second.
4. Get to know your team members and implement strategies that will truly benefit them.



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Exploring Your Management Methods

3 leadership styles you need to understand to identify the next generation of leaders

By Mark Anderson

Thirty-eight years of exposure to the construction industry have provided me with a look at a broad spectrum of industry leaders, leadership styles and insights into a correlation between those varying styles and company success. These leadership styles have, of course, evolved over time and will need to continue their evolution in order to remain impactful.

As the largest industry in the United States, the construction industry will need to evolve as well in order to maintain staff, develop organizations and build successful businesses in the years to come. How we as construction business leaders show up every day and represent the industry to our employees, clients, architects and the public, affects our bottom lines, the public's investment in infrastructure and how our industry will deal with perhaps its greatest challenge—finding the next generation of leaders.

Understanding the varying approaches to leadership styles can help an organization develop and grow its next generation of leaders. Take into consideration the following approaches, noting the group in which you might categorize yourself and how your team can learn from each.

STYLE NO. 1: THE BOSS

Early in my career, leaders tended to be entrepreneurial and autocratic, leading by the "command and control" mantra. We all know people like this. These particular business leaders were frequently either the entrepreneur, original founder or second-generation owner/manager of the business.

Decisions were single-point, driven by the leader's own instincts, drive and creativity. This leadership style still exists in many organizations, and very well may be present in yours if any of the following statements are true to the company:

- Staff avoid the boss because you never know how he or she will react, so it's best to only speak when spoken to.
- The classic "my way or the highway" sentiment conveys meaning to you.
- All significant decisions cross one desk and run through one pair of ears—the boss's.
- The leader is involved in every sale and is the sole chief of the organization.

- The leader's name, personality and persona are prominently featured in the company name, and he or she is viewed as the alpha and omega of the organization.

Obvious drawbacks to this style of leadership include a lack of empowered staff, a deficit in next-generation leadership (unless it is a family legacy, in which intergenerational conflict is a frequent symptom) and a centralization that severely limits the organization's growth and development.

STYLE NO. 2: THE INSPIRATIONAL LEADER

In some organizations, the boss model has evolved into more of an inspirational leader model. Collaboration is present to a much greater extent than in a command-and-control model. The inspirational leader may be present in your organization if:

- The boss has a large personality and remains the chief "rainmaker" and driver of the organization.
- The leader manages by fear and the "my way or the highway" mentality, and he/she is described by their staff as a smart superstar in the industry, driving the rest of the organization toward greatness.
- There is still a sense of the indispensable leader, whose name, personality and management style are inextricably linked to the reputation of the organization.

While more collaborative and evolved from the traditional boss style, limitations to this type of leadership model are still very much present. The world remains only as large as the length of the boss's arms, so to speak. Staff morale might trend higher in this style organization, given a greater degree of potential collaboration and autonomy. In addition, demands on leadership to find staff interested in and capable of engaging in higher levels of company improvement will be greater.

I would suggest that both the boss and the inspirational leader model limit company valuations. The presence of non-personality-driven leadership is key in the valuation of companies by acquisition and equity firms. The less dependent a company's success is on any one individual, the stronger the firm and, consequently, the higher the valuation of it.

STYLE NO. 3: THE MILLENNIAL LEADER

Construction industry leaders need to be experts in understanding millennials. Millennials are currently coming of age in the construction industry, while simultaneously avoiding the cliché reputations of the generation (the expectation that everyone gets a trophy and has a sense of entitlement in the workplace). The characteristic of this new era of construction industry leaders seems driven by the "why" of operations and processes.

Examples of questions from millennial leaders include: Why are we pursuing this project? Why did you make that decision? Why did we do it this way when it could have been done that way? The frequent impatience of both the boss and the inspirational leader style of management and leadership needs to give way to conversation, explanation, group meetings and discussion. There is, in my perception, a growing generational search for meaning, relevancy and understanding of the "why" that isn't going away any time soon.

> How we as construction business leaders show up every day & represent the industry to our employees, clients, architects & the public, affects our bottom lines, the public's investment in infrastructure & how our industry will deal with perhaps its greatest challenge—finding the next generation of leaders.

Like it or not, millennials are the new generation of leadership in our industry. The construction industry is marked by the ever-present urgency of strict strategies and ways of planning, tight controls, hard decision deadlines, and an intense focus on efficiency and the incursion of risk. Those are possibly not natural motivations for the generation always asking "why?"

The organizational development brought about by the next generation of leadership will give way to more innovative companies and higher valuations, given the broader management responsibilities and more creative approaches to industry challenges. Expanding participation in organizational leadership will benefit our industry by enhancing its appeal to the next generation of leaders. **CBO**

Since founding MGAC—a Washington, D.C.-based owners advocacy, project management, portfolio management and cost-consultancy firm—in 1996, Mark Anderson has grown a team of over 120 employees with offices in six cities across the United States and Canada. His management style is grounded in the mission of hiring talented people and giving them ample opportunity to do great things. The environment fostered by Anderson and his leadership team has been widely recognized, named one of The Washington Post's Top Workplaces and one of the Washingtonian's "Great Places to Work." Anderson serves on the board of directors of Burke & Herbert Bank, the Haverford College Board of Managers and the Scholarship Fund of Alexandria's Board. Visit mgac.com.



Set it & Forget it

How in-cab excavator technologies can boost your attachment productivity

BY AARON KLEINGARTNER

Today's crawler and wheel excavators offer technologies that make it easier for equipment owners and operators to minimize mistakes while using hydraulic-powered attachments. In fact, the integration of more sophisticated technologies, such as in-cab monitors, continues to improve attachment versatility and productivity. It's easier to adjust and operate attachment rates, flows, pressures and preferences than ever before.

The ability to preprogram and store attachment settings can be a pivotal game-changer, allowing you to adjust to fluctuating market conditions and significantly enhance your excavator experience. That's why it's important to take the time to understand these technologies now, so they can translate into measurable efficiencies on the jobsite later.



STORED SETTINGS SAVE TIME

Prior to on-board management systems, an attachment would be installed on an excavator and then manually calibrated with the minimum and maximum flows and pressures. Today, when changing hydraulic attachments, you or your operators can easily select the appropriate preset via liquid crystal display (LCD) screens or touchscreen panels to optimize your excavator and attachment functionality. Between 10 and 20 different one-way or two-way flow attachment presets can be stored in on-board monitors. One-way flow only requires hydraulic power in one direction, such as hydraulic breakers and plate compactors; two-way flow is ideal for excavator attachments that need bidirectional flow, such as hydraulic clamps, tilting buckets or shears. Each preset can be matched to specific operational requirements of an attachment by limiting the maximum pressure and the minimum/maximum flow rate that is delivered to the attachment.

A password protection function will help to discourage the improper attachment preset selection if you have an operator with limited understanding of hydraulic systems. Some on-board excavator monitoring systems can be configured with two or more passwords.

In addition to optimizing flows and pressures, monitors in the excavator cab provide quick snapshots of machine vitals. A main screen can track how long the excavator has been operating in one-way or two-way mode, giving you or your operators an ideal number of hours and usage. If you know your excavator has been working 50 hours in one-way mode, you can track

its fuel usage to have an idea of what the fuel costs will be going forward.

Engine coolant temperature, day and time, throttle position, idle hours, digging hours, and engine revolutions per minute (rpm) are other typical vitals displayed on monitors. Some equipment manufacturers also have the capability to display the surrounding area via rearview and side-view cameras.

CUSTOMIZED CONTROLS SIMPLIFY OPERATION

Another innovative excavator technology is the ability to customize your joysticks for simplified operation. Joystick controls make it easy to adjust the machine's variable auxiliary hydraulic flow and speed. Some joysticks are even equipped with customizable control settings that are specific to you or your operators. On some joysticks, a roller switch can be adjusted left to right to control the speed of two-way hydraulics, such as hydraulic clamps, commonly known as "thumbs." This feature can be beneficial if you need to secure material for loading and material-handling applications.

FLOW OPTIONS OPTIMIZE PERFORMANCE

To tailor your performance, some equipment manufacturers design their excavators with multiple work modes, such as digging, lifting, breaker and shear. The first two modes recalibrate machine power for digging or lifting. Breaker and shear modes change the auxiliary hydraulic flow for specific attachments to optimize performance and protect hydraulic components.

For instance, the breaker mode works great for hydraulic breaker attachments. Nitrogen-powered breakers are equipped with an upper and lower suspension system that isolates the power unit from the housing, making it an ideal fit for a variety of demolition and rock-breaking applications. The breaker mode maintains a consistent downward pressure for maximum attachment performance and component protection. Some excavator manufacturers offer hydraulic breakers with two-speed controls that can be manually adjusted between low- and high-frequency settings.

In addition, you or your operators may be able to modify or select the way the detent button (used to resist the rotation of wheel, axle or handle) operates. Some operators may want the breaker to engage only when a button is held; others want the breaker engaged and to continue throughout the cycle until it is pushed again. Both controls allow operators to match the breaker impact rate to the working conditions for better productivity. The second mode, called "shear," is a two-way auxiliary hydraulic flow that helps to secure material



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for superior loading and material-handling applications.

TRAINING & EDUCATIONAL RESOURCES

There is a wealth of information at your fingertips, as attachment technology continues to move toward greater sophistication and efficiency, balanced with easy operation. As an equipment owner, it's your job to make sure all employees who will be operating have adequate training on these technologies. Whether it's classroom training or hands-on training, your operators need a general understanding of basic operating procedures of controls and monitor displays before handling equipment.

Review the manufacturer's operation and maintenance manual. It's an important first step for anyone who operates your equipment. The manual serves as a primary guide for proper heavy construction equipment operation and maintenance, and it is provided upon delivery from your local dealership. The manuals should be kept in the machine's cab for quick reference. An electronic copy, such as a PDF, may be available to access on a smartphone or tablet for easy reference.

Heavy equipment manufacturers also recommend visually inspecting the attachment connection system each time you use the attachment to help detect any potential failures and prevent unexpected downtime. Hydraulic hoses from the excavator should be the correct length and always be routed properly to help decrease wear.

Many manufacturers have standard hydraulic hoses that are the correct length for your machines; however, if standard-length hoses are not included, make sure you refer to the manual. Your local dealership provides hands-on equipment training, and their service technicians possess the product knowledge and experience to help troubleshoot and maintain an excavator. They understand and can articulate recent technology updates, provide demonstrations and help to show you how to get the best performance from your machine.

The advancements made in new labor-saving attachment designs can translate into measurable efficiencies on the jobsite. By taking the time to understand these technologies, you can capitalize on what excavators have to offer and successfully meet expectations and deadlines. **CBO**

Aaron Kleingartner is the marketing manager for Doosan Infracore North America LLC, headquartered in Suwanee, Georgia. Kleingartner has 15 years of product development, analytics and strategic marketing experience with Doosan. Visit doosanequipment.com.





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Productivity: The Ultimate Competitive Advantage

Examining rental factors that align strategy with efficiency goals

BY GREGG CHRISTENSEN

In today's construction environment, the name of the game is agility. With concerns about labor and job complexity, contractors are constantly looking for ways to make their businesses more nimble and profitable. Utilizing rental equipment is a cornerstone of building and maintaining a versatile organization. The following examines essential elements of the typical construction rental decision-making process.



WHEN TO RENT

Renting equipment is a small but central, part of any project. If a critical piece of equipment is not available, it can result in idle workers, projects falling off schedule and evaporating profits.

Working with mixed fleets of owned and rented equipment is how most contractors do business. There are multiple criteria to evaluate when approaching the decision to buy or rent equipment. Purchasing construction equipment often requires large down payments, diverting a significant portion of a company's capital. Additional expenses associated with ownership include insurance, taxes, licensing, interest on loans and paying for a storage yard. Renting provides the opportunity to reduce capital expenditures and reallocate those dollars to higher return on investment (ROI) activities, such as technology.

When renting, contractors pay only for the equipment they need, for the amount of time they need it, so a firm doesn't invest in buying machines that will only see a short period of use. Flexibility is the most important reason contractors choose rental over ownership of equipment, according to a survey by Wells Fargo Equipment Finance.

Another factor is transport. When a company owns its equipment, it is responsible for hauling the equipment from one jobsite to the next, as well as for storage between jobs. Rental companies can get equipment to new worksites quickly and efficiently, using computerized maintenance programs and GPS systems to keep tabs on location, status and service needs.

An additional benefit of renting equipment is that rental companies upgrade their fleets on a regular basis, providing access to the most advanced gear. This gives contractors an opportunity to not only work with the very latest equipment models, but also to become deeply familiar with it before deciding whether to buy.

WHO TO USE

When assessing rental providers as a source of supplemental equipment, contractors should adopt a business-centric approach. The evaluation should examine whether the rental company can provide the equipment most likely to be needed for



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core projects; the depth of the company's fleet; and equipment delivery and availability. Here are some other items to consider:

- *What you need*—Construction work is fast-paced, and having access to different types of equipment has a major impact on project success. Rental companies have a broader inventory of equipment than a single construction company could possibly own, including attachments to tailor gear for specific tasks. Continual rental fleet upgrades also make it easier for contractors to keep up with compliance and standards like LEED, WELL and RESI. In addition, rental inventories often have specialized equipment, including temporary power and climate control, pumps, trench safety solutions, and more. Some rental portfolios also offer on-site services, such as tool management, portable restrooms and hygiene stations. Working with a rental company that has a wide product offering can reduce time spent sourcing equipment and eliminate invoicing from multiple suppliers. Increasingly, equipment rental companies are including advanced technologies, such as drone services and wearables in their offerings. While adoption of both technologies is still low in the construction industry, early users say the technologies have a positive impact on their jobsites, according to a Dodge Data & Analytics report.
- *When you need it*—Managers are expected to keep productivity up no matter the circumstances. Most rental providers can deliver equipment on schedule but, while useful, it is only table stakes. Contractors need to explore whether they can rely on their rental providers to meet unexpected needs, such as disaster response and power outages. For example, seasonality. A contractor may operate in a region that experiences a rainy season. These weather conditions can create short-term equipment requirements for dehumidifiers, pumps and portable generators with time-critical delivery. In these situations, contractors don't want to be shopping for a provider; they need an established partner they can trust.
- *Where you need it*—A construction company does not have to be large to have simultaneous jobsites in multiple cities, towns and even states. When you cover more ground, it means moving owned equipment between jobsites, and that creates more expenses: trucks, trailers, fuel, insurance, and outlays for drivers and training. It can also create more opportunities for safety hazards or violations. Once projects and facilities are up and running, it can be even more difficult to predict equipment needs in advance. When unexpected needs arise, local support becomes an important consideration. It can be costly to manage owned equipment over long distances; even a small delay can have a ripple effect on a project timeline. Proximity to rental equipment fleet and maintenance equates to a more immediate response.

BEYOND THE EQUIPMENT

When evaluating equipment rental providers, contractors should look for capabilities beyond just the actual equipment. Just as construction firms rent equipment to make jobsites more productive, rental companies must offer ways to contribute to contractor productivity. This includes fitting into mobile work environments, tracking key performance metrics and advancing training and safety capabilities.

Tech-enabled smart jobsites are increasingly becoming the norm among contractors. Today, equipment fleet management must fit into the mobile work styles of construction managers, providing detailed, actionable information while they are on the move—and they must also do it in a secure way. Mobile tools and technologies can provide jobsite visibility from a bird's-eye view, so managers know what equipment they have at multiple sites and whether it is being utilized. They enable data-driven decisions that maximize utilization of equipment and control costs. This also reduces waste and duplication.

A good rental strategy can deliver real savings to a construction company. It is worthwhile to measure and quantify those savings; for example, by tracking utilization on a per-unit basis, you can avoid paying for equipment beyond the point when it should be taken off rent. Don't miss an opportunity to benchmark your company's performance with industry peers. Contractors can score their equipment utilization against industry benchmarks, pinpoint improvement opportunities and quantify the dollar impact to make the most of their budgets and profits.

It is important for contractors to keep their crews trained, certified and safe, above ground and below. This is a priority on any project, and—in many cases—it is the law. It starts with finding the right training and certification resources. An equipment rental provider should help to reduce the overall cost and complexity of training and credential tracking. Ask to speak with your provider's safety experts—certified professionals who understand the hazards of construction jobsites.

Today's construction jobsites are challenging, highly complex and dynamic spaces. Therefore, it is necessary for contractors to seek rental equipment partnerships that help them to cut through the complexity and provide the specialized resources to get the project done safely, on time and on budget. Uptime is the goal, and productivity is the ultimate competitive advantage. CBO

Gregg Christensen is vice president, national accounts at United Rentals. He has been in the equipment rental industry for more than 30 years and has served in a number of sales and management positions. Christensen joined United Rentals in 2008 as a district manager, and most recently served as the regional sales and marketing director for the company's south region. Christensen holds a bachelor's degree in business administration from Florida Southern College. Visit unitedrentals.com.



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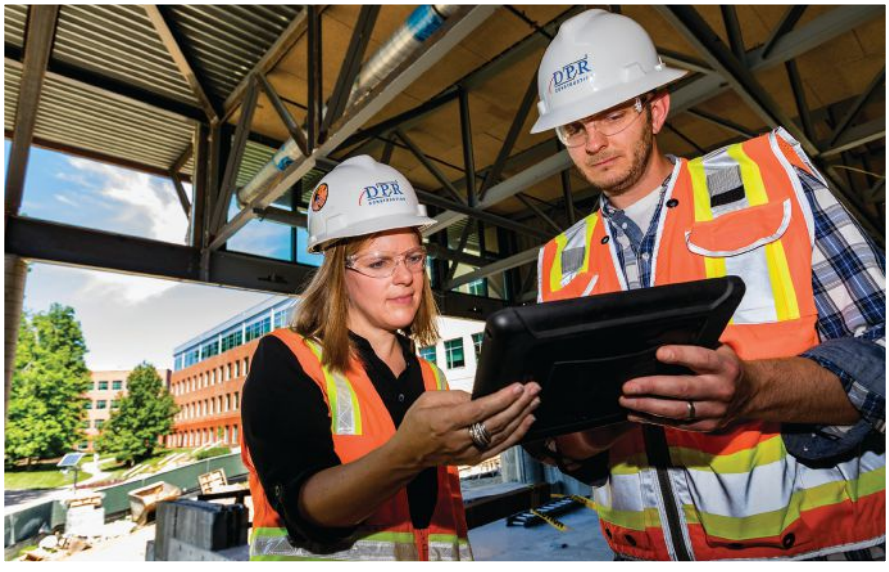

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DPR Construction's Leading Lady

Lisa Lingerfelt on project management & personal growth

BY RACHEL FULFORD

Are leaders born, or are they made? Is it nature, or is it nurture? Decades of research concludes that it is a mix of both, and construction management professional Lisa Lingerfelt is a testament to this conclusion. Lingerfelt, DPR Construction's Mid-Atlantic business unit leader, recently chatted with CBO about her reasons for entering the industry, history with DPR Construction, accomplishments as a project manager, experiences as a woman in the industry, and what keeps her headed to work every day.



CBO: What brought about your interest in construction and project management?

LL: None of my family members worked in the construction industry, although many people assume as much. I went to college for engineering because of my love for math and science. Freshman year, we were exposed to several different disciplines of engineering, and I chose civil.

During my sophomore year, I learned more about construction management. I did a co-op the summer after my sophomore year with Danis Environmental, a heavy construction firm. My love for construction really began during my co-op experience. I think internships are invaluable in a young person's life—they are truly the only way to experience the real world.

After earning my bachelor's degree, I earned a master's in construction management. I love that every day is different; construction management involves a lot of problem-solving, and it is very hands-on. Seeing a construction project from inception to completion is extremely satisfying.

CBO: Tell us about DPR Construction, the positions you have held there throughout the years.

LL: DPR is an international commercial contracting and construction management company with locations in 27 cities across the United States; Amsterdam, Netherlands; Seoul, South Korea; and Singapore. The firm has been ranked as a top 50 U.S. general contractor to work for every year throughout the past 2 decades.

I was interested in DPR because of its culture and technical focus, which are the same things that keep me there to this day. No matter how challenging my day is, I truly enjoy coming to work every day. DPR is a differentiator in the industry, and I love being a part of that.

I've held many different roles including project engineer—4 years; project manager (PM)—5 years; project executive—4 years; business unit leader—3 years. I have learned so much in each role, but project executive might be my favorite because

I like working close to the projects. As a business unit leader, I have to balance sales, people and financial results. A big passion of mine is our people, which has been my favorite facet of my current position. The success of the company all comes down to our talent. Finding great people and investing in them is important.

CBO: What role has the company played in your growth?

LL: DPR doesn't hold you back because of your age or your gender, and it doesn't really require that you be in a certain role for a certain number of years before you can advance. They reward the employees who have proven themselves, and provide employees who produce good results with new opportunities. DPR understands that motivation and growth happen when you are outside your comfort zone and being challenged.

CBO: Give us some highlights from your time as a PM. What have you learned and how does it affect your work now?

LL: My first assignment as a PM was a $60-million job. It was The University of Virginia lab building project, which was also probably the most memorable project I've worked on. I grew a lot during that project—our team finished it on time, with no punch-list items and under budget. We overcame a lot of difficulties together, and handing over the keys to that project with no punch list was a wonderful feeling.

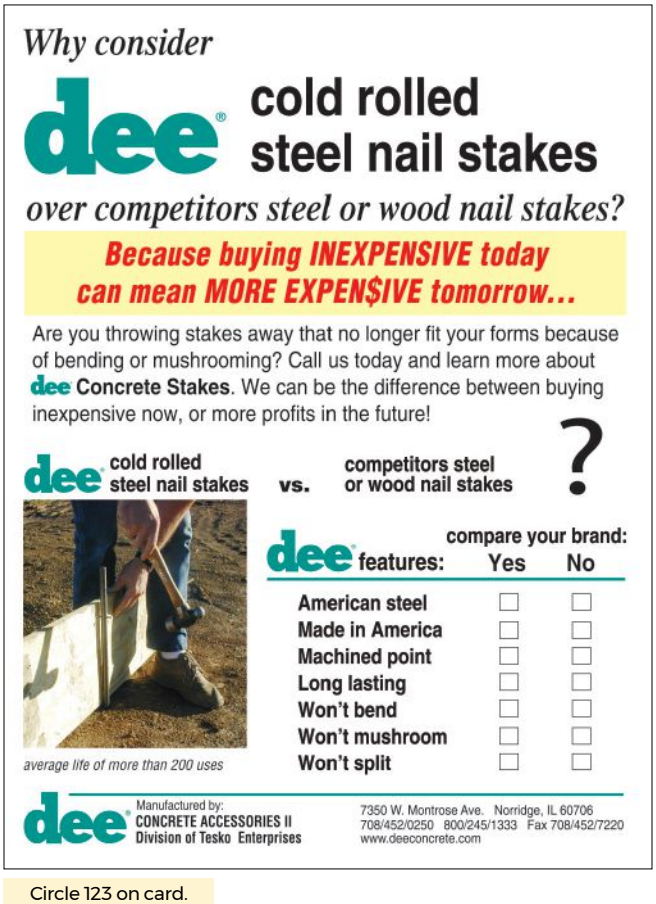
Being a PM taught me a lot about the people side of the business. I focused a lot on building relationships externally with design partners and clients, as well as mentoring and building our team internally. This leadership experience and growth gave me the foundation I needed to be a business unit leader. Running a region is similar to running a project, just on a much larger scale. You have to let go and empower, encourage and trust others, which can be hard to learn.

CBO: What advice can you share with up-and-coming PMs?

LL: At DPR, we say, "Ask forgiveness, not permission." If you know something is in the best interest of the project, push to make it happen. Also, always remember to lead by example, and never burn a bridge.

CBO: In your opinion, why don't more women consider construction as a career path, and why should they?

LL: I think there is still a perception that construction is not an industry for women. I also think a lot of women might not know much about construction as a career path. However, there are a lot more women in construction and engineering classes now



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than when I was in school, so I do believe things are changing. It is a fun, rewarding and challenging career path that has opportunities in many sectors, including estimating, IT, building information modeling (BIM), sustainability, mechanical and electrical coordination, and field engineering—far more options than most realize. Every day is unique. I love the combination of being a builder and a problem-solver, along with the personal interactions.

CBO: You started a new position as a PM after returning from maternity leave. How did your new role as a mother affect your role as PM?

LL: Motherhood gave me a new perspective on balance. I learned that work-life balance means something different to each person, and as a leader, you need to understand that about your employees and support it. Construction is a demanding industry, which makes finding the right work-life balance even more difficult, and I think it keeps some women from sticking around long term.

CBO: As a successful woman in construction, what advice do you have for others regarding gender relations in the field?

LL: As a woman, and as someone who has generally looked young for my age, I have encountered some people who have second-guessed my abilities. Instead of being defensive, I roll with it and let my abilities speak for themselves. My advice to other women in the industry is to find your voice and speak up for what you know is the right path forward. With experience will come self-confidence, and you'll eventually find that speaking up will become easier. Remember that you must earn respect; you cannot demand it.

FINAL THOUGHTS

According to the latest Bureau of Labor Statistics's Current Population Survey, only 9.1 percent of the construction industry is made up of women. On average, U.S. women earn 81.1 percent of the amount their male counterparts do. But, in construction, that disparity is much improved—95.7 percent—proof that many women might be overlooking a rewarding career option.

DPR supports Lingerfelt and other women in construction through its blog "Celebrating Women Who Build." Efforts like this and other programs, coupled with the impressive waves being made by other intrepid women like Lingerfelt, are helping to put construction careers on the radar for more women, and paving the way for a different brand of leadership. CBO

Rachel Fulford is the associate editor of Construction Business Owner magazine.





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Exploring the Safety Culture Mindset

6 steps to build a long-standing program & true company buy-in

BY PHILLIP GODDING

Anyone involved closely with workplace safety has heard presentations, webinars or people just generally talking about the need to develop an organizational "culture of safety" in order to reap long-term, incident-reduction benefits. It's a term that, despite being around since the Chernobyl disaster in the 1980s, recently has become a bit of a buzzword among safety professionals and modern business leaders.

Unfortunately, so-called improvements at the hands of overzealous safety officers, or those looking to delay a job, have given safety efforts some bad press. However, adopting a safety-focused culture does not have to limit your ability to get work done, nor does it have to lead to a reduction in productivity when implemented correctly.

So, what are the building blocks to creating this type of positive behavior within your teams, and how do you ensure that your efforts focus on worthwhile improvements?



WHAT IS A SAFETY CULTURE?

First, let's define the term. In its simplest form, a "safety culture" is the principles or values an organization attaches to the prevention of worker injury, or—to put it another way—it's the way in which a company views and treats safety.

Adopting a safety culture can be achieved within an organization of any size, but it is not something that can be cultivated overnight. It should be seen as a journey of continued improvement.

Outlined below are six nonnegotiables in the creation of a safety culture in any organization. There are, of course, others that could be included here, but implementing each of the ones below is a major step toward ensuring a sustainable approach within your business.

1. CREATE EXCITEMENT

To garner effective long-term commitment, your organization and teams need to be excited about making an improvement. Maintaining motivation about safety means communicating real benefits that are relevant to your team, as well as explaining the rationale behind the changes.

Encourage support from all levels of the business to help refine your ideas, which helps to ensure that employees will want to support your efforts (if you remain positive and pertinent actions are taken).

Don't be fooled into thinking that gimmicks are a way to excite people. You will suck all the energy out of a room the minute a safety word-search activity is produced or an outdated safety video is shown. Take time to celebrate the major milestones, and congratulate those who are willing to make significant contributions.

2. REMOVE BLAME

People are generally more likely to engage if they are not on the defense. In order to truly understand not only the lessons from incidents and near-misses, but also the elements that may contribute to incidents over time, an inclusive approach to feedback is required. Ensuring the team can talk openly about problems, potential improvements and additional opportunities assures employees that you support their honesty and integrity in reporting such incidents.

While this certainly doesn't mean that deliberate acts or misbehaviors should go unaddressed, it is important that everyone feels they can provide feedback without suffering severe, negative repercussions to their decisions or actions. Therefore, creating an environment in which improvements can be suggested without department protectionism is critical to developing a positive safety culture.

3. EMPOWER WORKERS

Establishing a successful safety culture requires people who support the organization's vision, so make all employees part of the plan from the start. Take your team members and coworkers with you on the journey, rather than simply pointing to a required destination. Trusting your local team will most likely encourage them to engage with the program and empower them to reinforce any new procedures long after the first safety sign is erected.

Often, when companies attempt to get serious about safety, they immediately put up a new set of signs prohibiting certain behaviors. While well intentioned and likely warranted, this may be seen as enforcing rules from the top down, which can lead to less employee buy-in.

You will gain greater participation by giving supervisors a say in how improvements can be made.

4. CONSISTENTLY & CONTINUALLY IMPROVE YOUR PLAN

We can all recall projects or initiatives that started with enthusiasm. These are usually accompanied by big announcements, and then, over time, motivation slowly fades. This happens when people are distracted by other priorities, management support weakens or the project encounters a challenging situation.

Any plans should be realistic and based upon the level of support your organization can sustain. This doesn't mean significant safety risks don't need to be dealt with; these, of course, should be addressed right away. But in terms of training, environment and procedural implementation, it is better to introduce a safety program in a way that it can be sustained by the organization. As such, you will want to avoid a "one step forward, two steps back" approach, which results in employee frustration and

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eventual disengagement. The journey to a true safety culture is a marathon, not a sprint. One important element of consistency is how you apply resources to any plan. While it is not always necessary to have a dedicated safety professional in-house (trainers can be brought in as required, especially for smaller businesses), it is important that anyone assigned responsibilities alongside another function has the bandwidth to handle them all.

5. MAKE COMMUNICATION A TOP PRIORITY

The purpose of communication should be to pass on information about all elements relating to safety, including positive messages. This goes beyond communicating incident rates and recent occurrences. When workers have experienced favorable improvements in working conditions or are perhaps trying out a new tool or method, share these with the organization to show that safety is not just about rules and procedures.

If you want to change the behavior of your workforce, consider how safety messages are transmitted. For instance, are they just posted on a board, or are they included in a monthly meeting and/or shared using digital media, which is more accessible and iterative? The way in which an organization communicates about safety demonstrate their level of commitment to making changes and improvements. Simply posting safety results without really sharing the implications is not sufficient or effective.

6. ENGAGE TOP-LEVEL SUPPORT

Are your senior managers committed and engaged? In addition to attending meetings, do they say the right thing during facility tours? Do they do the right thing when no one is watching? Being committed to a culture of safety means wanting to see daily improvements in the way the organization is addressing safety-related matters and being prepared to support the safety team/committee.

Consequently, obtaining support from top management is essential for success. Commitment to a culture of safety requires managers leading by example. This means that if rules are imposed on workers, such as wearing personal protective equipment (PPE) in a particular area, then management leaders need to follow these same rules. It's not about what they say; leaders' actions are a far better measure of their commitment to a culture of safety.

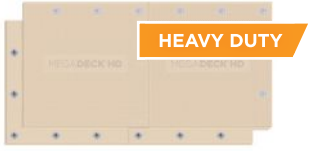
If a safety culture is implemented correctly and adopted by team members, not only will safety improve, but also areas such as productivity, employee retention and even product quality will increase. When workers see that the company has taken a genuine interest in their well-being, they feel valued, which, in most instances, leads to better on-the-job performance.

Building a safety culture is all about attitude—your company's, your co-workers' and yours. If each of the six imperatives above are addressed and people are committed, then your drive toward the successful implementation of a safety culture will become a reality. CBO

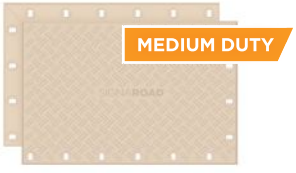
Phillip Godding is manager of product safety and reliability—EMEA region—at JLG Industries Inc. He is responsible for supporting the region's product portfolio on safety-related elements. Godding joined JLG in 2008 and has been influential in the development and implementation of the product safety and reliability strategy. He was one of the youngest chairmen of the International Powered Access Federation (IPAF) Manufacturer's Technical Committee, serving a 4-year term and steering a representative original equipment manufacturer (OEM) group through a number of industrywide improvements and initiatives. Godding is a Chartered Professional Engineer and holds a bachelor's degree with honors in mechanical engineering from University of Wales, Swansea, and is a registered fellow of the Institution of Mechanical Engineers. Visit jlg.com.



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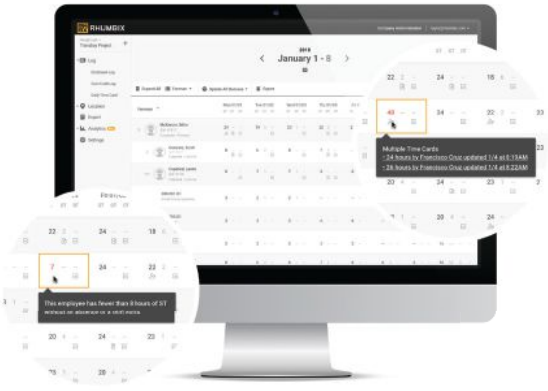
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New Products to Watch

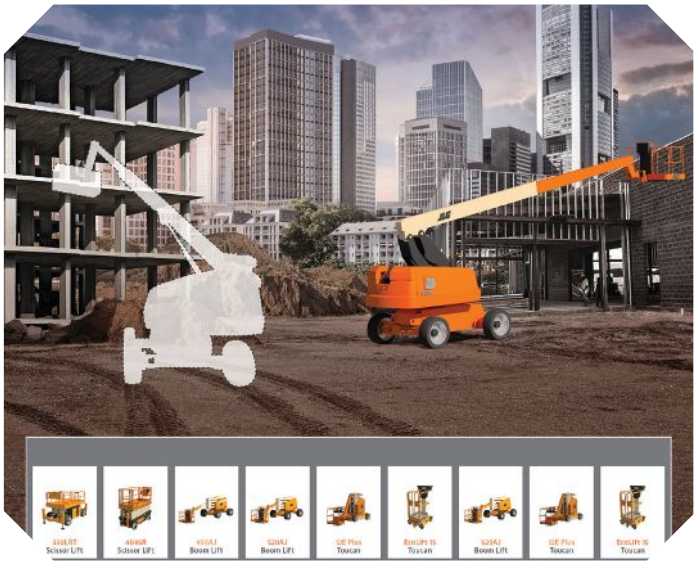
Selected by the editors of Construction Business Owner, these new-to-the-market products are just a few of our favorites recently released to the construction community. Stay tuned in every issue to find out what you need to know about the latest gear, solutions & industry-leading innovations.

JOHNDOW INDUSTRIES
Advanced Lighting System's AUD601R Handheld LED Audio Light
Released: 5/1/2018
Availability: U.S. market
What's new? A high-quality, economical 600lm rechargeable handheld, high-efficiency COB LED audio light with Bluetooth speaker and a powerful bracket magnet
Specs: Rechargeable, handheld LED audio light; built-in Bluetooth speaker; superior sound quality and wireless control for music play; 90-degree rotating bracket with powerful magnet; glow-in-the-dark fluorescent reflector that's easy to locate; 300/600 lumens; 30 quality and performance tests
Circle 202 on card.





RHUMBIX
T&M Tracking Workflow and Weekly Timecard View
Released: 7/24/2018
Availability: U.S. market
What's new? This release marks the first end-to-end, digital T&M workflow feature designed specifically for general contractors and subcontractors
Specs: New look and feel with ease of use; ability to edit, copy and paste, and approve timecards from the weekly view; option to sort group timecards by foreman for easy review; on-screen tool tips to answer questions
Circle 201 on card.



ALLOWS CONSTRUCTION PROFESSIONALS TO CHOOSE THE RIGHT EQUIPMENT EVERY TIME

JLG INDUSTRIES INC.
BIM-Compatible Product Library
Released: 6/26/2018
Availability: U.S., Canadian & European markets
What's new? All models in the library are available and downloadable in a data-rich format, giving everyone in the construction value chain access to the tool
Specs: BIM-compatible product library allows construction professionals to choose the right equipment every time with the complete set of 3D models
Circle 203 on card.



FNA GROUP (SIMPSON BRAND)
Portable generator SPG3645
Released: 5/1/2018
Availability: U.S. market
What's new? "This is a significant product launch for SIMPSON and for our customers. We are now able to make sure our customers are prepared at home or on the worksite by providing 24/7 backup power protection," said William Alexander, executive vice president of sales and marketing at FNA GROUP
Specs: 3600 running watts, 4500 starting watts, SIMPSON engine
Circle 204 on card.

"WE ARE NOW ABLE TO MAKE SURE OUR CUSTOMERS ARE PREPARED ON THE WORKSITE BY PROVIDING 24/7 BACKUP POWER PROTECTION"



GENIE
Genie S-85 HF telescopic booms
Released: 7/12/2018
Availability: U.S. & Canadian markets
What's new? It is engineered to "float" on soft surfaces, such as sand and turf, while performing heavy-lifting tasks on aerial worksites
Specs: Air-filled 41/18LL x 22.5 20 ply tires; 91-foot working height; 72 feet, 6 inches of outreach; low machine weight of 38,000 pounds
Circle 205 on card.



RANGER DESIGN
New shelving
Released: 8/1/2018
Availability: U.S. & Canadian markets
What's new? Tough, quiet and cost-effective shelving
Specs: Offered both in steel and aluminum; steel shelving is a powder-coated black, with aluminum extrusions to increase payload; both steel and aluminum shelving have a dynamic weight load capacity of 200 pounds and a 10-year warranty
Circle 206 on card.



FISKARS
Folding Pro Utility Knife
Released: 7/1/2018
Availability: U.S. & Canadian markets
What's new? Dual-locking system prevents accidental blade release without sacrificing blade-change speed; knife opens with the flick of a wrist; two-blade storage capacity
Specs: CarbonMax coating keeps blade sharp longer; multiple grips and Softgrip texturizing provide comfort regardless of position; easy-access buttons enhance ease of use
Circle 207 on card.



DANA INCORPORATED

e-Drivetrain system for Mecalac e12 electric compact wheeled excavator

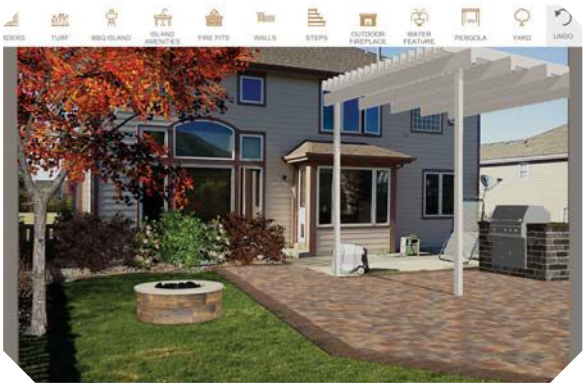
Released: 7/18/2018

Availability: European market

What's new? Energy Transition Award winner at 2018 Intermat Innovation Awards; with the Mecalac 12MTX as a base frame, this version is the world's first compact wheeled excavator powered entirely by electricity

Specs: With an 8-hour working range, the engine compartment in the Mecalac e12 houses LiFePO4 battery technology—lithium iron phosphate for service life that is three times longer than classic batteries; the batteries can be charged in approximately 7 hours. Mecalac 12MTX as a base frame. Featuring Spicer 112 axles and a Spicer 367 shift-on-fly transmission

Circle 208 on card.



CHAMELEON POWER

3D Repro Tool with MultiView

Released: 6/26/2018

Availability: U.S., Canadian & European markets

What's new? Allows the altering of photograph scenes with 3D products; MultiView eliminates image prep time, allowing multiple camera angles for the viewer

Specs: View design ideas from angles at which each photo was taken to ensure maximum visibility of a design space and speed sales conversions; update one photo with a design element, and instantly view element in the other photos

Circle 209 on card.

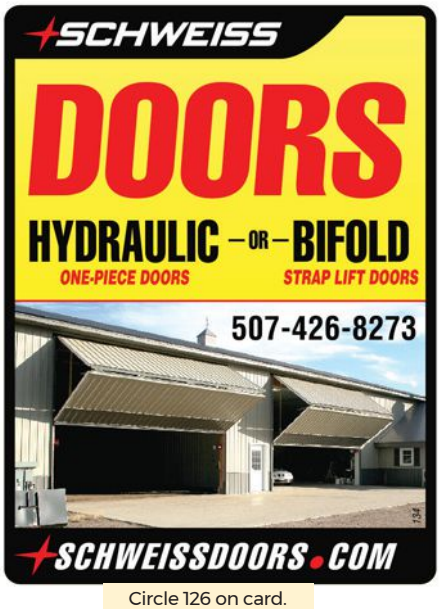


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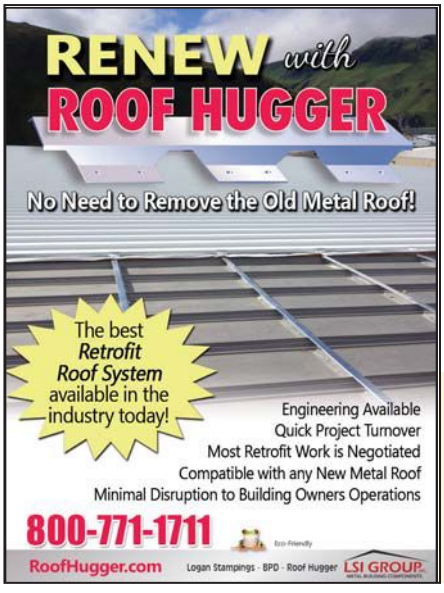
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Annual Value of Construction Put in Place

June 2016/2017/2018 Annual Rate Comparison

This chart compares the two previous years' total value of construction put in place to an annual forecast based on June 2018 figures. (Millions of dollars. Totals may not add up perfectly due to rounding.)

	2016*	2017*	June 18
Total Private Construction	**893,594**	**957,710**	**1,019,788**
Residential	460,433	522,118	568,295
Nonresidential	433,161	435,592	451,494
Total Public Construction	**292,809**	**283,592**	**297,443**
Residential	6,437	6,689	6,525
Nonresidential	286,372	276,903	290,918
TOTAL Construction	**1,186,402**	**1,241,302**	**1,317,231**

**Seasonally Adjusted Annual Rates. Source: U.S. Census Bureau*

$1,317,231

JUNE 2018 TOTAL ANNUAL VALUE OF CONSTRUCTION PUT IN PLACE

"Architects continued to see increases in demand for their services this summer, with new project work coming in at a healthy pace," said AIA Chief Economist Kermit Baker, Hon. AIA, Ph.D. "However, business conditions are beginning to vary across the country. While essentially remaining flat in the Northeast & Midwest, billings jumped in the South & dropped in the West."

AIA Architectural Billings Index (ABI)

National			*Regional - Billings				*Sectors - Billings			
Month	Billings	Inquiries	Northeast	Midwest	South	West	Multifamily Residential	Commercial/ Industrial	Institutional	Mixed
Jan-18	54.7	61.1	47.3	54.8	55.3	56.2	56.0	53.3	52.5	50.1
Feb-18	52.0	62.4	47.5	54.5	54.4	57.6	56.6	51.0	53.8	49.7
Mar-18	51.0	58.1	49.0	50.7	53.2	53.4	53.4	53.1	49.7	51.1
Apr-18	52.0	56.7	50.3	49.6	51.8	55.1	50.7	52.7	52.0	50.6
May-18	52.8	59.3	50.6	50.2	55.0	51.9	52.1	53.6	54.3	47.9
Jun-18	51.3	56.0	50.2	49.8	57.4	46.9	54.6	53.4	51.6	49.3

For more information on the index or to subscribe to the complete historical data going back to 1995 for your internal analysis, **please contact economics@aia.org.** The ABI presents monthly construction billings data, using a base score of 50. A score of more than 50 indicates a growth from the previous month, and a score of less than 50 indicates a contraction from the previous month. A score of 50 indicates no change. Source: The American Institute of Architects (AIA), Architecture Billings Index (ABI).

*Regional and Sectoral indexes are three-month moving averages, due to small sample size. All data is seasonally adjusted.
**Every January, the AIA research department updates the seasonal factors used to calculate the ABI, resulting in a revision of recent ABI values.



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