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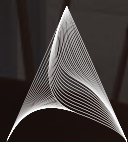
**TURNING CHALLENGES
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EXCELLENCE AWARD FOR AIMCO
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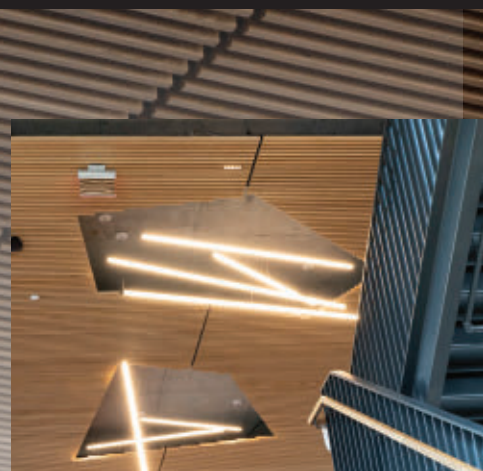


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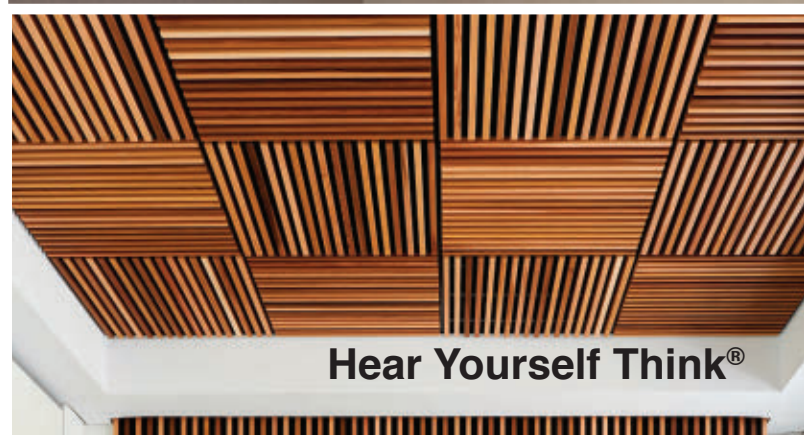
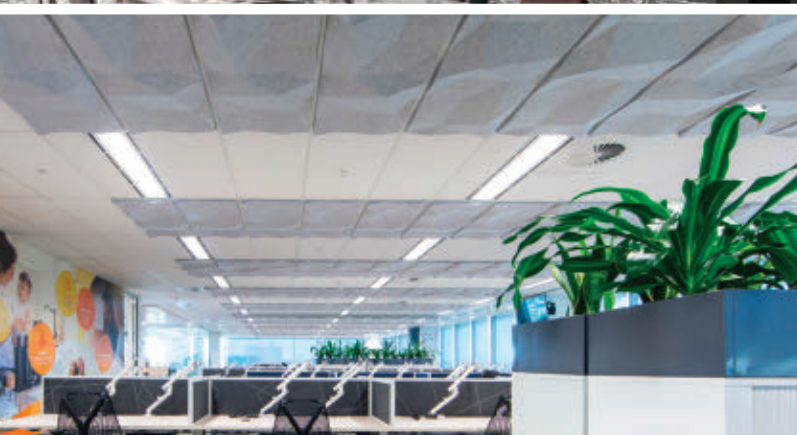
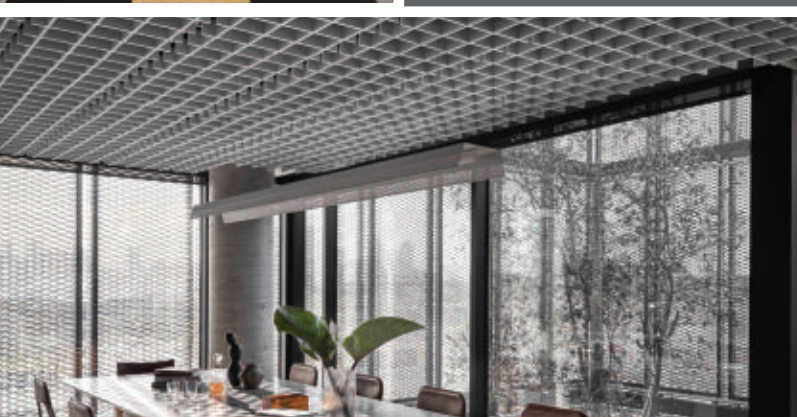
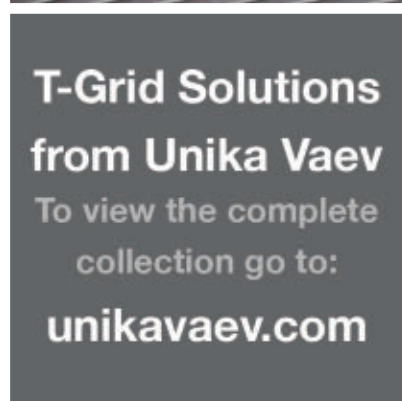
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Acoustical Interior Construction

JANUARY-MARCH 2021

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PRESIDENT'S MESSAGE

Our entire industry is based on beating our competition. Go out there and win your game!



BY SCOTT TURCZYNSKI, HEARTLAND COMPANIES, 2020-2021 PRESIDENT

As I write this, I am riding in a vehicle heading south about 11 hours to see my alma mater play in the Big 12 Football Championship game for the first time in school history.

My Cyclones are having an amazing season. We all love competition. Most of the time we look at it as competition in sports such as what I will be witnessing tomorrow.

But competition has its place outside of sports. Even in the workplace. Another one of our core values at Heartland Companies is to be competitive. What exactly does that mean?

We let others know that winning is important to us. We want our customers and suppliers to know we're here to win. We want to be the best. We find ways to gain an edge. We are competitive, but we do it in a respectful manner. Competitive doesn't mean dirty. You can be competitive and classy at the same time.

Bidding work, providing better service, developing state-of-the art products are all competitive by nature. Our entire industry is based on beating our competition. Go out there and win your game!

Hope everyone had a Merry Christmas and joyous New Year celebration. Best of luck winning your championship in 2021. ■

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MISSION

To identify, communicate and address interior construction and acoustical ceilings industry trends to our membership through a range of interactive channels including regional and national events.

VISION

To further the growth and development of the interior construction and acoustical ceilings industry by providing a unique platform for members and industry professionals alike to make connections, ask questions and exchange ideas.



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A CEILING FIT FOR THE BIG SCREEN

CERTAINTED ARCHITECTURAL,
KHS&S CONTRACTORS GIVE LOBBY
OF HARD ROCK HOTEL & CASINO A
GRAVITY-DEFYING LOOK

BY NICK FORTUNA



f Stefon, the “Saturday Night Live” character made famous by comedian Bill Hader, were reviewing this particular Super Bowl commercial, he no doubt would declare that it has *everything*: actress and singer Jennifer Lopez chasing a thief throughout the Seminole Hard Rock Hotel & Casino; an appearance by her fiancé, former baseball slugger Alex Rodriguez; and cameos by music artists Pitbull, DJ Khaled and Steven Van Zandt.

The two-minute commercial by big-budget movie director Michael Bay showcased the newly expanded hotel and casino in Hollywood, Fla., ahead of the 2020 Super Bowl in Miami, where Lopez would be the halftime performer. Lopez, the world’s most beautiful woman in 2011, according to *People* magazine, takes center stage in the ad, but that doesn’t mean she’s the most eye-catching part of it.

For several seconds, the commercial shows the main lobby and hallway of the hotel, featuring a visually arresting three-dimensional ceiling system manufactured by Decoustics, part of the CertainTeed Architectural portfolio, and installed by KHS&S Contractors. That project was just a small part of a \$1.5 billion expansion that included constructing the property’s most iconic feature, a 36-story tower shaped like a guitar that stretches 450 feet in height.

Like the Super Bowl commercial, this huge project seemingly had everything. The 3.2 million-square-foot master plan included a new performance theater, a separate eight-story hotel tower, meeting rooms, parking facilities, pools, villas, an energy plant and the renovation of restaurant and gaming spaces. But ever since the hotel’s grand reopening in





October 2019, visitors have paid special attention to that unique ceiling system in the lobby, often posing for pictures in a setting that seems to defy gravity.

"The ceiling has become an attraction in itself because it's just so unique and so memorable," said Ally James,

product marketing manager for CertainTeed Architectural, whose portfolio includes Decoustics's fully engineered solutions.

The design called for the installation of 448 oversized acoustical shapes that appear to be floating in the air while holding the meticulous alignment and geometry of the curved ceiling

shape, James said. The complex design meant that the three-dimensional acoustical pieces would need to be made of lightweight materials and attached to a concealed, custom steel-frame suspension system.

After CertainTeed Architectural created three different mockups for the client's



Since the Hard Rock Hotel's grand reopening in October 2019, visitors have paid special attention to that unique ceiling system in the lobby, often posing for pictures in a setting that seems to defy gravity.

review, they settled on an innovative solution using Decoustics Claro panels, and manufacturing began, James said.

The curved ceiling spans more than 3,400 square feet and is comprised of modules made in two square shapes and two rectangular shapes. Those modules were constructed from Decoustics Claro panels that were sloped and tapered to create complex 3D forms.

Each module measures 46 inches by 84 inches and weighs about 120 pounds. To minimize the weight, panels were made with special hollow-core construction, and different thicknesses of material were used to achieve the overall voluminous appearance and 3-D effect, James said. Raw acoustical material was prefinished and then cut to size. Jigs were created to assemble panels at mitered edges by hand, and the corners were reinforced for durability.

Resembling the classic appearance of dry-wall or plaster, Decoustics Claro panels are made of a malleable fiberglass material and offer superb sound-absorption properties, achieving a Noise Reduction Coefficient of up to 0.9 and a Sound Absorption Average of up to 0.87.

"Not only is the ceiling beautiful, it is high-performance," James said. "Decoustics Claro has excellent sound-control properties to mitigate noise and eliminate echoing inside the busy lobby."

The standard white Decoustics Claro panels feature 94 percent light reflectance, which helps to keep the lobby bright with natural light during the day. At night, the ceiling can be backlit with purple, blue or other hues to create a relaxed ambience, James said.

An acoustical paper veil is applied to Decoustics Claro panels to give them a

smooth, monolithic finish, and then acoustical paint is applied. The panels can be color-matched to a wide range of paint chips, pre-curved or custom engineered to achieve an array of shapes and sizes.

"Decoustics Claro offers a lot of flexibility with design, including the option to handcraft hollow-core shapes and keep the visually voluminous forms lightweight, which becomes especially important when creating 3-D architectural shapes that require a lot more acoustical material when compared to flat ceiling panels," James said.

A steel-frame suspension system was custom-engineered to bear the weight of each module and keep them properly aligned while remaining virtually unseen by visitors, creating the floating-ceiling effect. To achieve this look, the panels were made with special extrusions embedded inside them so they could be screwed to the steel frame. Numerous structural and panel stability tests were performed to ensure the safety of this suspension method, James said.

In addition, CertainTeed Architectural provided an instructional video and jigs to ensure a smooth installation process. The jigs allowed for speed and accuracy during module assembly, facilitated pattern matching and prevented panels from being damaged, James said. The assembled modules were then suspended from the structural steel arch using lifts to reach the plenum, and they were reinforced with wires to preserve the smooth curving radius.

Jeremy Haag, senior project manager for KHS&S Contractors, with an office in Pompano Beach, Fla., said his company worked on many aspects of the hotel's expansion, including the performance

theater and the casino, where CertainTeed Architectural's Tavola Prime aluminum beams were installed. But the in-depth planning done by CertainTeed Architectural made installing the complex ceiling in the lobby one of the easier parts of the job.

"They gave us the system and materials to make it work pretty easily," Haag said. "The biggest challenge there was getting the structural elements in place properly. Even though it looks pretty challenging, it was a repetitive system, and Decoustics engineered a mounting system and made those panels out of a lightweight material. That made installation pretty streamlined for us and gives the ceiling that appearance of defying gravity."

"The end result was quite impressive. It's definitely visually intriguing."

For everyone involved in the design and construction processes, the finished ceiling marked the end of a long journey. Shortly after the Seminole Tribe acquired Hard Rock International's properties in 2006, the new owners began planning a major expansion project. Those plans were shelved due to the 2008 financial crisis but were revived in 2013, and Decoustics was asked by architect Rockwell Group to get to work on mockups.

James credited KHS&S Contractors for helping to make the intricate design a reality.

"The end result is remarkable," she said. "The client was really happy with the final installation, and if you look at the original architectural rendering and the final ceiling installation, they are mirror images. CertainTeed Architectural helped realize the architect's vision and brought their idea to life, and that's a real success story." ■

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TURNING CHALLENGES INTO ACCOMPLISHMENTS

Heartland Acoustics & Interiors Wins a 2020 Construction Excellence Award for Aimco Corporate Offices Project

BY KATIE KUEHNER-HEBERT



One challenge that Heartland Acoustics & Interiors faced was the overall design of the project — there were numerous design elements that were unique to the project and had to be finalized “on the fly.”



It's one feat to install a custom wood ceiling system that has to be continuous from open corporate space to interior private offices, but to also integrate such a system with acoustical ceilings — such an accomplishment is why Heartland Acoustics & Interiors' Aimco Corporate Offices project was recognized as one of CISCA's 2020 Construction Excellence Awards.

The Gold Award for Contractor - Office - Smaller than 50,000 Square Feet - West of the Mississippi project was for the headquarters of Aimco, or Apartment Investment and Management Company, a publicly traded real estate investment trust company based in Denver. The tenant finish project comprised a two-story 44,000-square-foot space on the 16th and 17th floors of an occupied commercial building in the downtown Denver Tech Center. The project, designed by Tryba Architects with The Weitz Company as the general contractor, included open office workspaces, private offices, conference rooms, a boardroom and a café.

Heartland Acoustics & Interiors based in Englewood, Colorado was contacted by The Weitz Company just before the project started because the general contractor was concerned with the complexity of the project and the current subcontractor they were working with, says Geoff Johnson, director of preconstruction. The architect had very specific requirements and “a clear vision that put considerable demands on the project team.”

“Being brought onto the project team within a month of the project starting was the first challenge we faced,” Johnson says. “We had to create submittals and work with our manufacturer partners to ensure we did not delay the project.”

Another challenge that Heartland Acoustics & Interiors faced was the overall design of the project — there were numerous design elements that were unique to the project and had to be finalized “on the fly,” he says. One design element that stood out was the metal transition strip between the wood ceilings and the standard acoustical ceilings in the private offices, which was custom designed and manufactured by Gordon Inc. based in Bossier City, La.

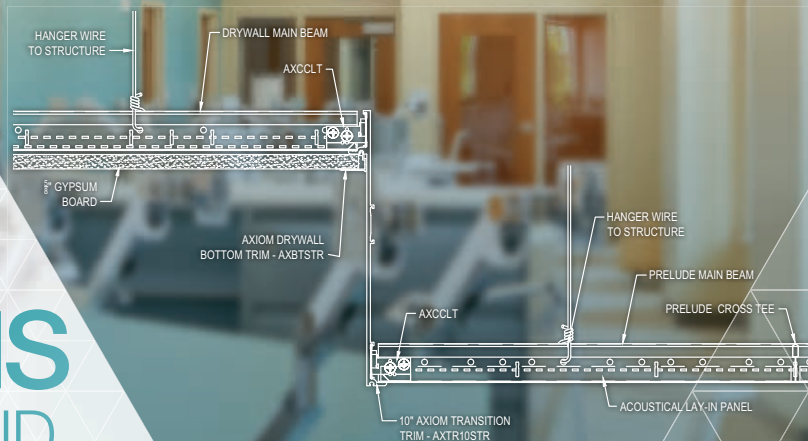
“Coordinating with two manufacturers to create that transition piece that worked with both systems was difficult but rewarding,” Johnson says. “The end user probably doesn't give that transition a second thought or realize the

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- Golterman & Sabo Inc. based in St. Louis, provider of architectural solutions.
- Novawall based in Alexandria, Va., provider of stretched fabric acoustical wall and ceiling applications.
- Armstrong Ceilings & Wall Solutions, a unit of Armstrong World Industries Inc. based in Lancaster, Pa. AWI provides commercial and residential ceiling, wall and suspension system solutions.
- Ceilings Plus, a unit of USG Corp. based in Commerce, Ga., that combines parametric modeling with advanced manufacturing solutions.
- Gordon Inc. based in Bossier City, La., provider of decorative metal ceilings, engineered ceiling systems and wall systems for commercial, industrial and institutional applications.

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amount of work that went into making that look seamless.”

Another key design feature of the Aimco project was the open office areas that wrap around the floors, he says. The exposed concrete structure coupled with the continuous private office windows and exterior windows required a creative approach to controlling the acoustics.

“The treatments needed to blend into the open office design and not be the focal point,” Johnson says. “For this reason, the acoustical wall treatments and



acoustical baffles in the open office areas are complementary to the aesthetic. The wall treatments are gray recycled denim panels that look like concrete to match the building structure.”

Johnson was most concerned about the schedule of the project and being able to deliver the work to the standards that Heartland Acoustics & Interiors usually delivers. Most of the products required for the job carried a long lead time and the subcontractors really had to move quickly to start to ensure the material was on time.

On top of the shorter schedule for such a complex project like this, the additional unique aspect that the subcontractor had to contend with was the sheer quantity of different products that needed to be installed: wood ceilings, standard acoustical ceilings, acoustical wall treatments, acoustical baffles, a custom metal baffle ceiling in the café and stretch acoustical wall panels in the boardroom.

“Normally, we might see a few of these products on one project, but this project had just about every type of product we install on it,” Johnson says.

From the start of the Aimco project, the general contractor instilled “a strong team-driven approach” and closely coordinated with all of the subcontractors, he says. The logistics of the project in an

occupied building meant deliveries had to be scheduled “just in time” for install.

“There was simply not enough space for all trades to have adequate material storage on site,” Johnson says. “To further complicate things, there was only one freight elevator. Many of the products installed were shipped to the site in crates and had to be uncrated prior to bringing them up to the project.”

Another unique aspect to the Aimco project: the attitudes of the entire project team, from the general contractor to the architect to all the subcontractors — “we all had to be committed to delivering a successful project,” he says. “The general contractor, The Weitz Company, really pushed that mentality from the start and we all really got behind them.”

The project was a success for both Heartland Acoustics & Interiors and the project team, he says. While most projects the company installs are this complex, the subcontractor specializes in being able to solve these types of challenges on projects.

“I cannot say enough about the project team and the team here at Heartland Acoustics & Interiors,” Johnson says. “From our installers in the field to our superintendents and operations staff, this type of complex project could not have been as successful without the professionals I work with here at Heartland.” ■



Piercing THE CORPORATE VEIL

BY LAURYN E. PARKS, MOMKUS LLC

A

parent corporation, its subsidiaries and its shareholders are generally treated as separate legal entities. A corporation acts through its own agents and officers, enters into its own contracts, and conducts its own business activities. If a claim arises from those contracts or activities, only the corporation's assets, and not those of its shareholders or subsidiaries, are available to pay any liabilities of, or judgments against, the corporation.

However, where the assets of the corporation are insufficient to pay the liability, many claimants will attempt to "pierce the corporate veil" to collect against the assets of the corporation's shareholders' or its subsidiaries. If the company failed to maintain the separation of its corporate entity from its owners or subsidiaries, claimants may successfully argue that the assets of owners and/or subsidiaries should be used to satisfy the company's debts and liabilities.

In attempting to pierce the veil between a corporation and its subsidiary or owners, the claimant will argue that the subsidiary or owners are either the alter ego or the agent of the company. The doctrine of piercing the corporate veil varies from state to state, but courts generally weigh a variety of factors in order to determine whether to allow a plaintiff to satisfy its judgment with the assets of a subsidiary or shareholders. These factors include:

- Is there a unity of interest between the owners and the corporation such that the separate

personalities of the corporation and the individual no longer exist and the company is merely a face for the operations of its only or dominant owner?

- Does the parent company completely dominate and control the subsidiary?
- Is the company inadequately capitalized?
- Did the company properly follow corporate formalities, such as by issuing stock, holding regular director and shareholder meetings, and maintaining its corporate records?
- Did the company commingle corporate assets with the personal assets of its owners?
- Did the company have active and functioning officers and directors?
- Does the subsidiary and parent company share the same officers and directors?
- Did the company pay dividends?
- Do the parent company and subsidiary share operational assets, such as employees, office space, phone numbers, and bank accounts?
- Does the parent company use the subsidiary's property as its own?
- Would maintaining the fiction of the separate corporate existence sanction a fraud or promote injustice.²

These factors are not exhaustive. The analysis is fact-specific, and courts have broad discretion in deciding what evidence supports piercing the corporate veil. Any one factor standing alone generally is

insufficient to justify setting aside the corporate form. For example, a parent company's ownership of all of its subsidiary's outstanding stock is, by itself, insufficient to prove domination, even though it demonstrates that the parent company is the primary source of power and exercises control over the subsidiary. However, in certain cases, even one factor may be enough if sufficient evidence of domination and control is present.

There are many steps a company can take to minimize the risk of piercing claims. In particular, a company should:

OBSERVE CORPORATE FORMALITIES AND STRUCTURES.

Properly capitalize its subsidiaries. A well-capitalized and insured subsidiary substantially weakens the possibility that a plaintiff will suffer an injustice if the corporate veil is not pierced. This is because the plaintiff can collect the full amount of a judgment from the subsidiary without needing to reach the parent company's assets.

ENSURE THE SUBSIDIARY OPERATES INDEPENDENTLY.

A parent company should avoid structuring its relationship with a subsidiary in ways that permit the parent company to exercise final decision-making power or other undue influence on the routine business operations of the subsidiary.

MAINTAIN ARM'S-LENGTH TRANSACTIONS WITH ITS OWNERS AND SUBSIDIARIES.

For example, a company should:

- ensure all financial transactions with the subsidiary or the company's owners are on an arm's-length basis, including any loans; and
 - fully document all transfers of money or other property between the parent company and subsidiary or owners. ■
1. The principal of "piercing the corporate veil" applies to not just corporations, but also to limited liability companies, limited liability partnerships, and limited partners in limited partnerships.
 2. *B. Kreisman & Co., v. First Arlington Nat. Bank of Arlington Heights*, 91 Ill. App. 3d 851 (2d Dist. 1980).

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BY MOLLY FLEMING

PR COORDINATOR, OKLAHOMA CITY CHAMBER

Katie Walker is the proud new owner of a Girl Scout vest, covered in badges showing off a variety of accomplishments.

Walker isn't a Girl Scout though. She's a project manager for Lingo Construction Services, Inc. who oversaw building the Girl Scouts Western Oklahoma's new Camp Trivera in Oklahoma City.

But Walker did more than keep everyone on task and the project moving forward. She inspired the next generation.

The \$12.2-million Camp Trivera is the second of eight STEM Centers of Excellence in the Girl Scouts of the U.S. system. The first center, Camp Whispering Cedars, is in northeast Dallas and the third is under construction in Oahu, Hawaii. The centers are

being developed as the Girl Scouts of the U.S. work to put 2.5 million girls into the STEM workforce by 2025.

In Oklahoma City, as the Girl Scouts Western Oklahoma started on its building, one requirement in the request for qualified proposals was that the Girl Scouts be allowed to work alongside the professionals. Four Oklahoma City-based firms were happy to show the girls the literal ropes and much more.

"The girls were excited to be part of the project," says Walker.

Lingo, Rees architecture firm, CEC Corporation, Cooper Project Advisors and ZFI Engineering brought together a team of women to work with the girls and show them all the science, technology, engineering and math involved in construction.

"Not many people think about all the STEM lessons involved in construction," says Walker. "It was a good opportunity to show the girls about the industry."

Rees and Lingo partnered to host a fall break construction camp for the girls. The

girls learned about pouring concrete and created pavers that were left at the camp.

During the camp, Rees and Lingo worked with the girls to come up with the themes of each sleeping room. At the end of the camp, the girls had to present their design idea to the group. There are a variety of room styles, with the same diversity in themes, from caverns to chemistry. The Rees interior team designed the wallpaper for each room, based on the girls' final designs.

"Rees brought in an old travel trailer to use as a souvenir shop during camp," says





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Walker. "They also used colored rope to create knots from floor to ceiling, which are knots the girls will learn to do. Those aren't your typical building materials.

"It was a team effort to bring everything together," she adds. "Each part of the building has a unique feature, so it was a big puzzle to put it all together."

Lingo also helped keep the project within budget by using a pre-manufactured building, then worked with Rees' design to add a second floor and bring in attractive and useful elements that help STEM

remain at the top of mind. For example, the exterior-layered bricks can be used for a geology lesson and the rain gauges create sound when water runs through them.

The girls not only learned about the building, but how to work on the site. Lingo President Stan Lingo says with the varied terrain, the project was challenging because the tree canopy and surrounding landscape couldn't be disturbed that much. For Lingo superintendent Jordan Leach, who has a degree in environmental science, Walker says he was thrilled to figure out how to

get all the components on the site without disturbing the trees.

The 17-acre camp has three treehouses, primitive camping places and an outdoor amphitheater. Lingo employees built the treehouses themselves as a way to give back during the project.

The construction science lessons aren't over though. The girls can continue learning about buildings at the camp with its open ceilings, showing the duct work. All the air systems are labeled so the girls will know how each one is connected. There are similar signs in the bathroom.

Other STEM-related features throughout the building include a rock wall in the meeting space. As the girls climb up the wall, labels point out the different layers of rock in the earth's surface. Next to the meeting space is a large kitchen, which can be used by caterers for non-Girl Scout events or can be used as a place to learn about cooking, the tastiest STEM lesson.

Another feature is the night-sky ceiling on the second floor. The Girl Scouts' Astronomy Club placed the constellations in the ceiling. The outdoor pool offers a place for the girls to swim or work on underwater robots.

But many STEM lessons will happen in the lab, a large room that has plenty of natural lighting with aluminum storefront and windows on the east and west side. There's room to spread out microscopes or engineer the perfect contraption to keep an egg safe.

Walker says she enjoyed being involved in the project. Girl Scouts Western Oklahoma CEO Shannon Evers praised Walker's insight and guidance, in an email to Lingo.

"She has a grasp on construction techniques, and she can communicate those skills to our field construction team," says Lingo. "So she can perform in an executive committee meeting, yet command what's needed in the field. She can be firm and not be rigid."

The camp opened in September 2020 and is having limited-attendance events. Lingo says it's a legacy project and it will be a great benefit to the community.

"It's something that generations for years to come will get to enjoy," he says. ■

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CONSTRUCTION OUTLOOK



Turning the Corner on the Election and the Strange, Extraordinary Year that Was 2020, It's Time to Look Ahead and Discuss What Members Should Be Wary of — and Excited About — in 2021

BY A.D. THOMPSON

Pundits, comics and the year's wittiest t-shirts may have proclaimed 2020 a dumpster fire, but despite its unprecedented challenges, many contractors found favor in this, the Year of Our Pandemic. Some pivoted toward success. Others, in economy segments less COVID-19-tolerant, suffered.

"We are ready to work with the incoming administration and Congress to help craft an agenda that is focused in rebuilding infrastructure and reviving the national economy," said AGC of America CEO Steve Sandherr in a post-election statement, citing highway and transit law, COVID-19-related liability reform and

industry-stimulating tax measures among the desired outcomes of these new partnerships.

It's time again to peek around the corner, to discuss what may be in store and what members can do to prepare.

NATION BUILDING

"Bright spots" were shining amid Murphie Barrett's prognosticative chat on a recent post-election AGC webinar. Barrett is the association's vice president of Congressional relations, infrastructure advancement, and her reports included positive takes — one

of them a recent one-year extension of the FAST Act (for Fixing America's Surface Transportation).

"[Having this certainty] is pivotal to the construction industry in light of the pandemic which we are all still dealing with," said Barrett, noting that it's a departure from the three-to-six-month extensions generally afforded such legislation. "We were able to make a really compelling case for one year."

The Water Resources Development Act, too, was seeing bipartisan support at the time of this writing.

"Hopefully, we'll have another bill there in terms of improving the nation's infrastructure," says Barrett, noting that the process serves as a reminder to members of both houses "that you can really get things done when you work in a bipartisan, bicameral manner."

Also encouraging: a \$287 billion reauthorization of the Federal Aid Highway Program that would run another five years along with the possible reauthorization of the Invest in America Act.

"This would potentially mean \$494 billion over five years not only for what we've traditionally seen in surface bills in terms of highways, bridges and public transit systems, but would also provide significant levels of investment for passenger rail systems."

The ideas have seen similar support among ranking Democrats and Republicans.

"Thematically what we've seen from these proposals," says Barrett, "is emphasis on both addressing the needs for urban and rural areas dealing with climate change, both in terms of improving resiliency and reducing greenhouse gas emissions, expediting the delivery of projects and incorporating innovation and other forms of transportation technologies to really make sure that this infrastructure is operating in a safe and efficient manner."

CLIMATE CONTROL

It's something Julian Anderson, president, Rider Levett Bucknall, says might have some members of the construction industry on alert, but it all depends on your perspective.

"If [the contractor's] interest is in making a buck today, then I think there will be some regulatory concerns. "If the interest

leans more toward concern about climate change and other issues, they might see opportunities."

Many of the climate-related things President Biden said he'd do on Day One could impact the industry, says Anderson.

Among them: limits on methane pollution for oil and gas operations, implementation of the already-existing Clean Air Act and reducing greenhouse gas emissions from transportation by developing new fuel economy standards, but others he says will be seen by savvy contractors as fortuitous.

"Ensuring that U.S. government buildings and facilities are more efficient and climate ready is a cost — but for contractors, architects and engineers, that's also an opportunity."

Same goes, he says, for reducing emissions and cutting consumer costs through new standards for appliance and building efficiency.

"And this is all regulatory, none of it requires Congressional action."

Looking at it seriously, realistically, would be wise.

"[Climate change] is going to have to be addressed," he says. "The construction industry will be part of that....I'd rather see it addressed now. It's an ugly issue already; it will only be worse in the future."

Opportunities here are many, including the construction required to solve problems related to rising sea levels and fresh-water scarcity.

"In the shorter term, there are coastal flooding situations [architects, engineering and constructors] will be able to help address. In the long term, the issue gets even more complex. By 2050, it's likely there will be huge parts of the west of the country that won't be habitable. The opportunities around relocating shifting urban areas will be quite real. And if we can slow things down and extend that horizon, that will be a good thing."

WILL THE TAXMAN COMETH?

He always does, of course. But will he come for more this year?

"Before the election, my prediction was that taxes would almost certainly go up," said Matt Turkstra, director, Congressional relations, tax, fiscal affairs and accounting for AGC, in the association's recent webinar, "but now I think it's a little more cloudy."

It comes down to what Turkstra literally refers to as "a tale of two Senates."

"There's such a huge and stark divide between the two parties," he says, "I think we could make the argument that who is in control will be more important with regard to taxes than any other issue we might discuss."

Republicans passed sweeping changes in 2017 using a budget reconciliation maneuver "for the Affordable Care Act, the Bush tax cuts in 2001 and again in 2003...and you only need 51 votes in order to enact tax changes and in some cases some pretty hefty spending changes."

Many of the changes — the Bush-era tax cuts and a significant portion of those made by President Trump — were enacted on a temporary basis.

"You can't have a loss of revenue outside of the budget window," Turkstra explains. "It's all about the budget window when it comes to reconciliation."

Though Turkstra acknowledges the possibility that some of the Biden campaign's proposed tax changes may be viable, "it's tough to see any of those surviving with Mitch McConnell in the majority leader's chair."

Smaller firms with concerns over payback of 2020 Paycheck Protection Program (PPP) loans will likely be required to navigate robust applications associated with loan forgiveness, but Turkstra says heightened scrutiny is typically associated with loans above the \$2 million threshold.

RELATIONSHIPS ARE FOREVER, REGULATIONS AREN'T

Much in the way the Obama administration saw some of its regulatory changes undone following President Trump's election, so, too, may the outgoing team see changes during President Biden's term.

"You can expect a lot more enforcement actions coming from agencies like OSHA, the EPA and others across the spectrum," says Jimmy Christianson, AGC's vice president, government relations. This, regardless of who controls the Senate.

That said, he notes, the federal rulemaking process is long, with myriad steps.

"There are many avenues where we as an association and an industry can provide input and assert our legal rights...and much of that litigation and research comes from

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our construction advocacy funds, which is why that is such an essential tool and will be over the next four years.”

Regardless of how long a given politician is in office — one, two, four, eight years — Christianson is quick to remind members that career services posts are held by professionals who remain in place for decades.

“We continue to maintain relationships with those folks...and they want to hear from us, because we bring credibility when we make our case.”

Even so, the same Congressional Review Act that permitted President Trump and the Republican-led Congress to repeal 15 of the Obama administration’s late-term regulations could allow the same for the new President.

“The rulemaking process is like whitening wood with a needle,” Christianson explains, citing President Trump’s rollback of the WOTUS (Waters of the United States) rule and its federal protections for rivers and lakes, which took roughly four years to take effect. “The Congressional Review Act is more like dynamite.” Once you repeal a rule through the Congressional Review Act, the agencies can no longer put forth a substantial or similar rulemaking...it’s a really blunt tool.”

Sandherr offers context.

“Four years ago, [AGC was] giving members of Congress ideas on what Obama-era rules fit into the time slot, making them eligible for repeal under the Congressional Review Act. Now, we’ll be playing defense on some of these rules.”

LABOR PAINS AND PROMISE

Though the PRO Act, “a unionizing wish list,” — as Jim Young, AGC’s senior director of Congressional relations for labor, HR and safety, calls it — “will not become law on Jan. 5 if the Republicans hold the Senate, which makes the election down in Georgia very important, there are elements of the PRO Act that can certainly be accomplished by executive order and the regular regulatory process.”

But the news isn’t all bad, as is the case with multi-employer pension reform composite plan provisions.

“If [the contractor’s] interest is in making a buck today, then I think there will be some regulatory concerns. If the interest leans more toward concern about climate change and other issues, they might see opportunities.”

– Julian Anderson, president, Rider Levett Bucknall

“[AGC has] done a particularly good job in educating the leadership in Congress on this. We’re cautiously optimistic that there could be some breakthrough at year’s end on a funding bill, as this is typically how these things are addressed.”

On the flipside of labor, Anderson holds that the President Biden’s stance on immigration reform could prove beneficial.

“An enormous number of people who work in the construction industry — or did three or four years ago — have had difficulty with their documentation,” he notes. “The Biden administration is very committed to fixing immigration and that should help construction on the labor supply side, which has been a real pressure in the last few years.”

A potential focus on education — both higher and K-12 — for families earning less than \$125,000 annually, could also be a legislative win, “as it should help people who are looking to hire construction managers, architects and engineers coming from lower income families.”

GOING VIRAL, STILL

Lingering, too, will be the effects of COVID-19, which we’re still in the middle of, Anderson points out. And business-wise, it hasn’t been all bad for the industry.

“If you’ve been involved in data centers, logistics, water treatment plants you’ve been busy as all get-out,” he notes. Other segments, sports, entertainment, hospitality, aviation? Not so much.

Anderson sees two stages for the industry in 2021: a first quarter or half that may be stunted, a second that could come flooding back into the black.

“Initially, I suspect people will have expectations about COVID-19 going away that will not be immediately met,” he theorizes. “As that happens, optimism will sour... especially as we get into the rush to get hold of a vaccine.”

Once over that hump, however, he anticipates industry segments held back since the start of the pandemic could very well take off.

“While the first three or six months, for construction, might be miserable, I expect the last six might be rather good and busy...providing that Congress can come together to actually pass some of this necessary legislation.” ■

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COVID-19 and U.S. Construction

RECENT IMPACTS ON CONSTRUCTION FIRMS



77% with **500** or fewer employees have received and are using their PPP (Paycheck Protection Program) loan provided by the CARES Act



35% have laid off or furloughed workers



24% added employees in May, and **14%** added employees in April



42% say some employees are choosing not to work during this time, citing COVID-19 concerns and/or family responsibilities



20% have begun working on new/expanded construction as a result of COVID-19, though there will likely be virtually no new private starts except pandemic-related projects and emergency repair work



Owners are increasingly **HALTING** projects and **CANCELLING** scheduled starts

- Stoppages are attributable more to owner concerns than government orders
- Shortages are easing for PPE but not for materials and workers
- Half of firms say suppliers have warned of late/cancelled deliveries

In order to provide its membership with updated information on the impact that COVID-19 is having on the construction industry, AGC of America conducted bi-weekly surveys from March through May 2020. Here are some highlights from those survey results.

For more information, please visit <https://www.agc.org/coronavirus/agc-surveys>.

HOPES FOR THE INDUSTRY POST-PANDEMIC



63% hope for “safe harbor” protocols to provide them protection from tort or employment liability for failing to prevent a COVID-19 infection



39% hope for larger federal investment in infrastructure



32% hope for state DOT funding to help prevent project delays as a result of lost revenue from the pandemic

Stats from 742 respondents – AGC Coronavirus Survey Results (May 18-21, 2020)



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Coming Soon to a Neighborhood Near You

BY SHERYL JACKSON

Faster connections. Less lag time. Ability to connect more devices simultaneously. These three benefits of a 5G wireless network have the potential to significantly affect productivity, safety and quality on a construction site, but how soon will contractors actually be able to access a 5G network?

Two major carriers — Verizon and AT&T — advertised the launch of their 5G networks beginning in 2019, but initial access to enhanced networks were located in few major cities. The continued rollout of the networks was slowed in 2020 due to the COVID-19 pandemic. Even as the carriers continue expanding the network, it is important to note that the initial focus will be on larger urban areas, then move to smaller cities and suburbs, and finally into more rural areas.



The typical implementation of any new service for wireless carriers focuses on providing coverage first to areas where people work, which means urban areas with dense office space making sense for the first area of deployment, explains Keith Pennachio, chief strategy officer and executive vice president of SQUAN. "The next areas to launch new services, including 5G, would be locations where people live, and then where they play," he says. This strategy means that a city like New York, which has a dense number of work locations as well as residences, is likely to use the technology first." The pandemic and the shift to entire workforces working remotely from home, may affect some timelines to moving to areas that people live, he adds.

Although a national 5G network is not yet available, and there are few devices designed to work with 5G technology, Pennachio believes that there will be dense adoption of the technology in the next 10 years, with contractors able to access and use it sooner in many areas.

In the meantime, members of the construction industry should understand the benefits of 5G, and the steps they need to take to prepare to implement it within their company and their jobsites.

"5G promises to be a new way of communicating, with many benefits for contractors," says Burcin Kaplanoglu, executive director, innovation officer, Oracle. Some of these benefits include:

GREATER SPEED

"We all have 4G phones but 5G phones and devices will provide speeds of 1 gigabyte per second, which is 10 to 100 times faster than we currently have," says Kaplanoglu. "This will allow contractors to send large documents, such as 3D or 2D drawings with hundreds of pages, almost instantaneously and enable multiple users to interact with each other in real-time."

LOW LATENCY

Latency is the time required to get a reaction from another device. Lower latency will minimize the delays in videoconference calls that everyone has experienced in 2020, but it will also support higher level device operations in construction. "If I'm in Chicago, I can safely control a machine on a jobsite remotely because there is no lag time," says Kaplanoglu. Rather than have operators travel to jobsites to physically sit on the machine, contractors can eliminate travel time and more effectively use the operators' time.

CAPACITY TO CONNECT MORE DEVICES

"A large construction site might need thousands of sensors but 4G limits the number of devices — phones, tablets, sensors — that can be connected to the network at one location," says Kaplanoglu. "5G technology can handle one million sensors per square kilometer."

This will ensure connectivity on every



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size project as well as every type of location — urban or rural.

As telematics on construction equipment becomes more important to monitor maintenance needs and to identify causes of equipment failure, the ability to connect more devices increases in importance, says Kaplanoglu.

Greater coverage and the ability to connect more devices will increase the ability to use other technology, says Pennachio. These technologies include drones for inspections, closed circuit television via the wireless network to enhance safety, virtual or augmented reality that allows contractors and owners to “walk through the building” and see plumbing, electrical and other systems located behind walls, he says.

There are no disadvantages to adoption of 5G in the construction industry, says Pennachio. There is, however, a potential disadvantage of not adopting 5G when it is readily available, he says. “The lack of 5G capability in a company may make it more difficult to adopt new technology, leading to gaps in future tech adoption.”

While cost of new technology such as access to 5G and investment in devices that operate on the new network may make some contractors reluctant to adopt it, there can be some cost savings that will reduce the return on investment, suggests Kaplanoglu. “We currently use our mobile

devices as computers that store information, but the improved speed, capacity and latency of 5G may mean that more can be done on the cloud, which reduces the need for mobile devices to store information,” he says. Because the mobile device will only be needed to collect and transmit data rather than collect, store, compute and transmit, the cost of devices should go down and battery life of the devices will be extended, he says.

Although 5G may not be available nationwide yet, there are four steps contractors should be taking to prepare their companies to adopt it.

1. BE PREPARED TO HANDLE MORE DATA

Increased speed and capacity will mean more data collected from a myriad of sources, so contractors need to plan how they will manage the data, says Kaplanoglu. “Put a plan and processes in place now to better manage data you are collecting today to build a strong foundation for the exponentially greater volume of data 5G will provide,” he suggests.

2. EVALUATE NEED FOR NEW DEVICES

Inventory the devices that will need to be upgraded to 5G compatibility in offices and in the field, recommends Kaplanoglu. The actual upgrade will be in the future,

but it is a good idea to know the scope of replacement that will be necessary.

3. DON'T FALL FOR THE HYPE

Pennachio offers a word of caution about devices now advertised as 5G. “This technology is much more about speed and capacity of a network, and less about specific products,” he says. “For example, a friend who was looking at purchasing drones noticed that the specifications said it had 5G capability.” Adding the term “5G” in a product description is a marketing tactic, because before the drone can operate better than other drones, there first has to be a 5G network in the location of the drone, he explains.

4. RESEARCH NETWORK AVAILABILITY AND APPLICATIONS

“There are degrees of 5G in operation in different places, but a contractor who wants to know exactly what is available in the area of a jobsite or company, should reach out to the major network operators in the area,” recommends Pennachio. “Each of them has specific divisions that focus on 5G and can discuss what is available.”

Contractors can also research applications that truly add value to the company's operations, says Pennachio. “Consulting with companies that offer solutions is also an option, but be sure the consultant you choose to work with is neutral,” he says. Consultants who are not tied to one network provider will focus on your company's needs to find the best solution, he adds.

Preparing to implement 5G technology before it is available everywhere will give the early-adopters a competitive edge with enhanced communication, says Kaplanoglu. Building the foundation to handle more data and understanding how the technology can improve operations will improve the results, he says. “You have time to get your house in order now.” ■

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There are no disadvantages to adoption of 5G in the construction industry. There is, however, a potential disadvantage of not adopting 5G when it is readily available.



SITE SECURITY


An Increasing Dependency on Technology Demands Better Asset Protection

BY KATIE KUEHNER-HEBERT

The construction industry is joining other sectors on the road to digital transformation, and with that cyber risks naturally increase. The COVID-19 pandemic is exacerbating those risks, as would-be fraudsters take advantage of the disruption. Fortunately, mitigation tools, employee education and cyber insurance can minimize those risks.

HOW THE PANDEMIC IS EXACERBATING CYBER RISKS

Now that many administrative employees are working remotely from their homes and jobsites have been modified to abide by COVID guidelines and restrictions, the necessary modifications have led to a greater interest in technology

A person is seen from behind, looking at a large computer monitor in a server room. The monitor displays a complex network diagram with many nodes and connecting lines. The room is dimly lit with blue light from the screens and server racks in the background.

within the industry, says Ken Wengert, second vice president and regional director of construction, energy and marine risk control at The Travelers Cos.

"However, as more contractors invest in technologies that can help them improve operations and safety on the jobsite, and enable some to work from home, the opportunity grows for cybercriminals who may be looking to do harm," says Wengert, who is based in Albany, N.Y.

One potential cyber risk: Employees accessing the construction company's systems from home on their personal devices might unwittingly open the door for allowing fraudsters to listen in on conversations after hacking into the devices, says Nikki Ingram, cyber security risk engineer at Zurich North America, based in Schaumburg, Ill.

"Companies can install a virtual private network — be aware, however, that sometimes the bandwidth gets very sensitive and loses connection," Ingram says. "While some vendors just tell companies to reduce the security in order to increase bandwidth, we do not recommend that — that move opens up businesses to increase risk of cyber attack."

In addition to its own risk mitigation efforts, Zurich, offers access to pre-vetted cybersecurity vendors that have the resources to help protect customer data when their employees work from home, including training to spot social engineering attempts.

The pandemic has also necessitated specialized business continuity plans to handle unexpected things like office shutdowns and staff working remotely from home, Ingram says. Contractors need to plan for how these employees will share information remotely to staff at project jobsites that might still be ongoing, or to project partners including owners, subcontractors and suppliers — and how that information can remain secure.

"For the backend of the pandemic, contractors need to plan for how they will safely transition back to their offices, whether that be in a stepped hybrid process where some staff return to office and others remain remote," she says. "It is important that policies are established for these transitions, such as if employees plan to use a USB memory stick to download and transfer data from their personal devices to office computers, they should buy a fresh USB so that it's clean and not corrupted by any malware or ransomware."

FOLLOW A NUMBER OF RISK MITIGATION STEPS, INCLUDING SOME THAT “DON’T COST A THING,” SAYS TIM FRANCIS, ENTERPRISE CYBER LEAD AT THE TRAVELERS COS. INS. HEADQUARTERED IN NEW YORK CITY.

“Creating strong computer passwords and updating them on a regular basis is an easy place to start, although only 60 percent of Travelers Risk Index survey participants from the construction industry admitted to doing so,” says Francis, who is based in Hartford, Conn. “Visiting a cyber prevention website to learn how best to protect your business is another suggestion that doesn’t take many resources and can make a meaningful difference.”

Other smart steps companies can take include installing firewall/virus protection; implementing data backup processes and hacker intrusion detection software; completing cyber risk assessments on the business and vendors; conducting internal IT audits; training staff; and simulating a cyber breach to identify areas of system vulnerability.

The 2020 Travelers Risk Index found a majority (53 percent) of construction decision makers are reliant on their computer systems for their businesses to run properly, but 81 percent have not conducted a simulated cyber breach to identify areas of system vulnerability. A simulation can improve a company’s chances of avoiding cyber events from ever happening.

“Dealing with the unknown is always an unsettling proposition, especially when it involves the financial health and stability of a business,” Francis says. “By simulating a cyber breach, exposures and vulnerabilities can be identified. More importantly, they can be addressed through actions taken that can safeguard the company against suffering a similar type of cyber event.”

As more contractors embark on digital transformation, cyber insurance coverage “is more important now than ever,” says Dan Zastava, director of corporate underwriting and product development at Sentry Insurance in Stevens Point, Wisconsin.

“Cyberattacks can impact project designs, bid data and security systems involved in architectural proposals,” Zastava says. “These attacks can also result in lost data, theft of personal identifiable information and in some cases, a business shutdown.”

While the coverage offerings may vary from one insurance carrier to the next — some providing broader coverage than others, cyber insurance can assist the policyholder in responding to a covered incident by providing some or all of the following:

- The cost of a cyber forensic analyst to determine how the hacker got into the system and what data was accessed.
- The services of an attorney to identify state-by-state notification requirements pertaining to the personally identifiable information of customers living in each state.
- Public relations firm utilization.
- Liability coverage if the insured is sued as the result of a covered breach event.

- Business interruption.
- The physical loss of sensitive information on HR paper files, cyber extortion, social engineering and fraudulent impersonation.

“The insurance carrier may also have tools and resources to assist with reducing cyber risks, such as incident response plan templates, webinars, training modules and federal or state-specific information,” Zastava says. “Carriers that provide cyber insurance coverage also can provide preventative solutions to help businesses plan ahead to mitigate the impacts of an attack.”

Preventative measures include drafting an incident response plan; knowing the initial steps to take after an incident occurs; conducting regular training with employees to spread awareness and to identify phishing attempts; and regularly backing up data and key software programs to offline storage devices.

Another growing cyber risk for contractors: additional vulnerabilities within the cloud, says Corey Nachreiner, chief technology officer at WatchGuard Technologies in Seattle.

“Like many industries, construction organizations leverage digital services like software-as-a-service apps or network-based services specific to the industry,” Nachreiner says. “These often web-based services can suffer from certain risks if not implemented securely.”

One of the most common and simple issues is credential-based fraud — “hackers don’t break in, they log in,” he says.

“There’s little need for hackers to figure out very complex technical tricks to compromise your digital services if they can just hijack a valid user credential,” Nachreiner says. “Unfortunately, stealing credentials is often very easy using phishing attacks, or even finding re-used credentials from other breaches.”

A cybercriminal doesn’t need to evade any defenses if they can impersonate a trusted user, he says. To protect against this, contractors should implement multi-factor authentication on all their online services so that hackers can’t log in just because they have a stolen password.

Moreover, many of the digital services presented today are web-based solutions, and a badly coded web application can expose many technical vulnerabilities hackers might exploit to gain control of a company’s system or its data, he says.

“Web application vulnerabilities are a complex discussion for non-technical folks, but the easiest advice we can give is to refer the web developers of any system you create to the Open Web Application Security Project at OWASP.org,” Nachreiner says. “There, coders can learn the right way to create online web services without exposing different vulnerabilities. We also recommend you get a third-party security auditor to penetration test your digital services at least once a year.”

COVID-RELATED SOCIAL ENGINEERING

One social engineering phishing scam related to the pandemic looks like an informational email from an official agency, such as the Centers for Disease Control, about the COVID-19 virus and the workplace, says Robert Douglas, president of PlanetMaggie, an IT consulting and services firm headquartered in Fremont, Calif.

The email asks the contractor to sign up to receive ongoing information using their work email address and password, says Douglas, who is based in the company's Dallas office. However, in reality, the fraudster is using the contractor's credentials to obtain access to the contractor's email account to get to the company's contact list — phone numbers and email addresses of all of the people the firm does business with.

"Next, the cybercriminal emails those contacts, posing as you, the contractor," Douglas says. "If the target is an accounts payable person at another company, the fraudster might demand they pay a late invoice — which is totally fake. If the target is an administrative assistant, the cybercriminal might pose as the company's owner and tell them, 'Hey, I've got this big deal — I need this much wired to close the deal.' Or, if it's holiday season, they might tell the assistant, 'Please order 50 \$100 gift cards and send them to this address.'"

Fraudsters often target contractors because their workforce tends to be somewhat decentralized, spread across offices and trailers, and less apt to have formal cybersecurity training, he says. Many contractors also see IT purely as an expense, which means they may skip on security measures like firewalls, email filtering and cloud backups.

Contractors need to train their employees on how to spot and reject social engineering attempts, most commonly sent via email, Douglas says. Most of PlanetMaggie's customers in the financial, biotech and manufacturing industries provide their employees with cybersecurity training on a yearly basis at a minimum. However, not many in the construction industry conduct such training.

"IT can only do so much, even with the best security measures," he says. "All it takes is a single click on a malicious link in an email — and malware can encrypt your workstations

and network devices, causing permanent loss of your company data. Employees must receive training on how to look at an email and figure out whether it's fake or not."

During training, PlanetMaggie walks employees through all the different ways their network and their computer can be infected or attacked, and how to determine if an email is malicious. If they are ever unsure, they should always contact IT support.

"It's important to train employees ASAP," Douglas says. "Ransomware attacks have gone up 150 to 200 percent since the start of COVID lockdowns, taking advantage of employees working from home, increasing the available 'area' cybercriminals can attack."

ADDITIONAL CYBER RISKS

The two most common challenges that contractors face are with ransomware and business email compromise attacks, says Dan Zastava, director of corporate underwriting and product development at Sentry Insurance based in Stevens Point, Wis.

Ransomware is a malicious software that restricts access to files on an infected machine — usually by encrypting them — and then demands ransom payment in exchange to restore access to the files, Zastava says. Common attack methods include file downloads or malicious links through email, remote attacks on servers and malicious email attachments.

"In contrast, business email compromise is a form of cyber crime that leverages email methods to trick victims into transferring money or other goods to a perpetrator instead of the intended recipient," he says.

One of the main motivations for targeting a construction site is the theft of intellectual property, such as blueprints that could provide intelligence a criminal would need to defeat the physical security in the future, says Corey Nachreiner, chief technology officer at WatchGuard Technologies in Seattle. Another could simply be compromising the supply chain to divert payments or extortion via ransomware.

"Most cybercriminals just want to make money, and ransomware is very effective at getting companies to pay extortion by locking up digital assets that are required to do business," Nachreiner says. "If you use IT technology for things like blueprints, and you

don't have hard copy backups, ransomware could significantly disrupt your ability to work at a site."

To protect against this, construction companies should invest in employee education — teach all managers, employees and contractors to identify phishing attempts, flag suspicious emails, calls, or wire transfer requests, and not click on every link they receive, he says. Contractors should combine this education with technical security controls like advanced malware protection products that can identify even the newest ransomware, and domain and URL filtering solutions, which will prevent users from reaching bad sites even when they accidentally click the link.

Contractors are also more vulnerable due to the increased use of ruggedized tablets and smartphones in the field, Nachreiner says. Regularly update these devices, change their stock passwords and assess them for potential compromises. "Ultimately, the more digital technology you use on the jobsite, the more cyberattack surface there is for malicious actors to target; especially if those technologies are connected wirelessly," he says.

For more traditional devices, like ruggedized laptops or tablets, contractors should make sure to install a full endpoint protection suite that protects the device directly, no matter where it is in the world, Nachreiner says. If they are using computers, printers and other computing devices on a jobsite, contractors need to secure them the same way they do at your office by deploying a firewall, leveraging other network security services, installing endpoint anti-malware protection, patching software and backing up data.

"But also be sure to train workers on the importance of physical security at a jobsite," he says. "Even if the site you are working on is currently unoccupied, physical access to it could allow attackers to plant devices and equipment that make it easier for them to launch a cyberattack on the building's future tenant." ■

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RESPONDING TO A

CRISIS

HOW HUMAN RESOURCES CAN
MAKE THINGS BETTER, NOT WORSE

BY CODY ELLIOTT AND MICHAEL PORTER
MILLER NASH GRAHAM & DUNN

Just as unforeseen site conditions can test a contractor's problem-solving skills, unexpected events can test a construction employer's crisis-management readiness. Crises can hit at any time, and individuals involved in human resources are usually — and rightly — on the front lines of working with a company's management team to address the challenges that any present.

SCENARIOS

An employee espousing racist views at a rally is recorded by a member of the public who sends the video to the HR manager, threatening to contact the media if the employee is not immediately fired.

A former employee uploads a YouTube video, claiming that a jobsite has a multitude of safety violations. The video is picked up by the local news as the 'viral video of the day,' which prompts protests outside the company's headquarters.

A manager responds to an e-mail "phishing" scam, which results in a ransom demand to recover employee social security numbers and other personal information as well as the company's proprietary industry data.

Employers across the country find themselves in these and similar situations every day. When they arise, individuals involved in human resources play a critical role in helping to navigate the team through the crisis. A crisis can often create legal liability in the employment realm and having a sound crisis-management plan — and individuals who are prepared to implement that plan — can help reduce legal risks. Here are a few ways to prepare before a crisis hits and to effectively manage the crisis when it does.

A man in a dark suit and brown shoes stands with his back to the camera on a large, dark, mossy rock. He is holding a brown briefcase in his right hand. The rock is in the middle of a turbulent ocean with white-capped waves crashing against its base. The sky is overcast and grey.

PLAN BEFORE A CRISIS, PLAN AGAIN WHEN IT HITS AND BE FLEXIBLE

Knee-jerk reactions to crisis often prompt a secondary crisis — for example, an unvetted statement to the media that can significantly hurt a company's credibility if the statement is later disproved. Planning before a crisis arises and planning a path to manage it at the outset are key to effective crisis management. Strong planning — and sticking to the plan — can also help to reduce the size and impact of the inevitable bumps along the road. Before a crisis hits, HR and other managers can develop a plan for unexpected events and crises. The plan should address the following questions:

Who needs to be involved in decisions about how to respond to the crisis? Identifying the triage team before an issue arises will help ensure that the team gets up and running more quickly to get ahead of the crisis. Otherwise, the company will spend the crucial first part of a crisis in determining who should be involved, rather than mobilizing and responding quickly. Although different circumstances may result in variations of the critical team members, pre-planning can still reduce the initial scurry of decisions about who is involved.

What person or persons are authorized to speak on behalf of the company, and how are they prepared to speak? Designating an effective communicator with public-speaking skills can help reduce the risk of making misstatements to the public that could come back to harm the company later. And because it is not just what the company says in response to the crisis, but how the company says it, the company's authorized communicator should pay careful attention to tone and language in the company's response.

What third-party vendors — from PR specialists to investigators to legal support — might the company rely on in a crisis? Knowing which trusted advisers to call when a crisis hits will save critical time.



If a crisis involves compromises in technology, what backup systems exist, and is there a plan to minimize business disruption? Data breaches are becoming more and more common and having a robust contingency plan in place that addresses both the breach and the company's ongoing operations is a critical piece of any crisis-management plan.

When a crisis does hit, the company should:

- Assemble the triage team together as soon as possible.
- Address outside support and confirm confidentiality obligations — without creating e-mails or text messages that could be subject to later misinterpretation. Utilizing an attorney may help facilitate candid discussions necessary in a crisis.
- Set up a meeting schedule, identify goals and points of connection, and assign tasks to be accomplished along the way.
- To the extent possible, wait to make critical decisions until sufficient facts have been confirmed. Too often, a lack of information or making assumptions about a situation leads to haphazard actions that can create a host of problems, including legal exposure.
- Be prepared to be flexible. Having a plan with goals and tasks provides a helpful baseline from which to work, but crises are often fluid situations that require some degree of flexibility.

BE KNOWLEDGEABLE AND SHARE KNOWLEDGE

HR professionals frequently deal with legal issues that are lurking beneath a crisis, and acting without understanding can exacerbate the crisis over the long term. That's why HR professionals must be knowledgeable about common employee-related issues that can create liability and be on the lookout for them. The following are some legal issues that commonly arise in crisis:

Defamation and similar claims. Crisis creates pressure to make broad statements about the circumstances. Take the second example above: Pressure to respond to the viral video about safety issues may create pressure to disparage a former employee. But public statements about the former

employee, especially if false, but even if simply negative or disparaging, may create legal risk. Human resources, with appropriate legal support, can help reduce the likelihood that company statements are interpreted in a way that damages the reputation of individuals and brings about liability. And HR professionals often know and work closely with important company values and principles and can help communication professionals frame positive statements, which tend to create much less risk than statements impugning someone. Similarly, even internal communications to other employees can raise potential risks of damaging current or former employees — an HR professional must support the company's goals about providing access to information, while at the same time balancing the risks that come along with sharing that information. But HR professionals should also be aware that certain jurisdictions have protections for statements that are reasonable in light of business interests. Knowing the protections in the company's jurisdiction can help HR professionals be careful not to paralyze the company from taking action or prevent it from making statements that may have business value.

Social media. In today's 24/7 digital world, most crisis situations involve social media. HR professionals should be familiar with the law in their company's jurisdiction about reviewing social media and taking action concerning it. Laws may restrict how employers learn about social media or restrict the use of information discovered in social media. These laws may be quite detailed, and HR professionals should ensure that the company does not succumb to pressure to address a crisis by violating employee rights related to social media use.

Due process. While private contractors do not have to worry about constitutional due process, juries and judges expect fairness. If employees are organized, collective bargaining agreements include process requirements, and a company's employee handbook may also provide some measure of process for potential conduct violations. It is incumbent upon HR professionals to make sure that a crisis response does not undermine the company's ability to comply with its processes for employees.

Employment decisions such as termination of employment. Every jurisdiction protects employees from retaliation for certain types of activity that is considered "whistleblowing" or protected activity — for example, raising concerns about public health and safety, or reporting in good faith a perceived violation of the law. These issues often arise when employees are in crisis situations. Before employment action is taken, HR professionals must work closely with executives and legal advisers to make sure that employment decisions are made for legitimate reasons or, if a situation is unclear (which is often the case), that the risks and benefits of all potential employment actions are carefully considered.

BE STRATEGIC — AND PART OF THE TEAM

HR professionals constantly engage in company strategies and can be instrumental in implementing a company's crisis strategy. The company must balance individual rights, the company's public perception, the company's internal morale, and a host of other values when determining how to respond to a crisis. This balance is often difficult to achieve because some actions further certain goals, while others create risk. HR professionals must work collaboratively with their executive teams, listen and participate, and help the company find the right balance for navigating the waters of significant crisis.

HR professionals are usually leaders within their organization, and crisis response requires leadership and teamwork. By working to plan, imparting knowledge and developing and implementing a company's strategy, HR professionals can be key to managing the inevitable crisis and putting the company in the best position to manage unexpected crisis and recover without long-term damage. ■

Cody Elliott is a litigation attorney who handles construction and employment and Michael Porter is a partner on the employment law and labor relations team serving businesses and the public sector at Miller Nash Graham and Dunn.

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HOW FLEET MANAGEMENT SOFTWARE CAN

Improve Your CONSTRUCTION BUSINESS

BY BRET KASUBKE

DIRECTOR, CUSTOMER EQUIPMENT SOLUTIONS, UNITED RENTALS

Equipment — both owned and rented — may not be as large of an expense as labor or materials, but is nonetheless a strategic variable in a construction business. Utilization of earthmoving equipment, aerial platforms, tools and a wide range of other equipment can be a barometer of overall project efficiency.

For any contractor with a significant fleet of vehicles and heavy equipment, active and effective fleet management provides insight and visibility into utilization and opportunities. Equipment fleet management software can help reduce downtime, optimize fleet operations and decrease the total cost of ownership

(TCO). All these factors contribute to improving worksite productivity and the business bottom line.

Achieving effective fleet management is nearly impossible these days without a good fleet management software solution. Digital tools, such as low-cost sensors, GPS technology and telematics, are powering cloud-based fleet management software to manage both owned and rental equipment.

The most important fleet management features will vary from contractor to contractor, but a well-designed user interface, easy-to-use dashboards with one-click actions, automated reporting and easy integration with



internal back-office systems can make a platform more effective. Platforms that include a mobile app bring decision making closer to the work which increases worksite efficiency and saves money on underutilized equipment.

Here are nine ways fleet management software can improve a construction contractor's business:

1 IMPROVE EQUIPMENT VISIBILITY

Thanks to telematics, fleet management software can pinpoint, typically on a map, where every connected equipment asset is located at any point in time. This tracking can even extend to assets spread across multiple worksites. The system will allow a contractor to easily find "hidden" equipment, reduce yard scavenger hunts and avoid the costly transferring of equipment from site to site unnecessarily. Optimally, the software enables equipment visibility in real time from any device.

2 PREVENT THEFT

The software can provide geofencing alerts that notify a construction firm when an asset isn't where it should be, which will help reduce theft and unauthorized use.

3 TRACK AND INCREASE UTILIZATION

Contractors can't improve what they don't measure. With software that tracks utilization by asset type or a specific asset over time, fleet owners and managers will be able to identify underutilized equipment. With this tracking knowledge, they can either reallocate the equipment to a worksite that needs it or evaluate the assets as potential equipment rental candidates.

4 MONITOR DRIVER AND OPERATOR BEHAVIOR

Reviewing reports on how an asset is being driven or operated can lead to improved worker safety and asset longevity. Speeding, heavy braking and acceleration, frequent reverse travel and other behaviors may signal the need for operator feedback, coaching or retraining.

5 PLAN AND EXECUTE PREDICTIVE MAINTENANCE

Just-in-time maintenance based on factors such as engine hours, which some fleet management software tracks, will help reduce long-term maintenance costs. It can also help preserve the lifespan of vehicles and equipment. Fleet management software helps a company in creating maintenance schedules for each asset based on usage. Fault code alerts will provide a tip-off to problems before they lead to costly failures.

6 UNDERSTAND TCO

Most fleet management solutions allow contractors to view the costs associated with owning and operating a specific piece of equipment, including maintenance costs. Knowing the TCO for each asset or asset class is critical to making strategic, data-driven decisions on how to optimize replacement cycles and when it is more cost effective to rent instead of own.

7 KEEP COMPLIANCE

Vehicle and equipment inspection checklists and reminders help ensure a company that it is following regulations, making it easier to comply with appropriate regulations.

8 LOWER OPERATING COSTS

Equipment fuel usage reports and alerts related to excessive idling can help a company to lower fuel costs. Addressing predictive maintenance will help lower repair and preventive maintenance costs.

9 REDUCE MANUAL ADMINISTRATIVE PROCESSES

Third-party software that's easy to integrate with in-house applications will reduce manual data input and administrative redundancies.

EFFECTIVE FLEET MANAGEMENT CAN IMPACT THE BUSINESS

Rental equipment fleets require close management to keep a cap on total equipment spending. Fleet management software will help contractors pinpoint the location of both rented and owned equipment and



schedule reports and alerts, including geofencing alerts. These solutions allow companies to benchmark their utilization across a variety of asset classes against industry peers and quantify cost savings of improved utilization. Low-utilization alerts and role-based notifications that inform the right manager of overspending on purchase orders, or of late returns, will help companies spend less on rentals.

Increasingly, fleet management software includes mobile app accessibility that keeps users informed while on the go and enables them to take quick actions to get work done. The software can also allow splitting equipment costs across purchase orders and integrate with internal ERP systems to streamline procurement, billing and payment processes.

Managing a fleet of vehicles and equipment is a complex undertaking. The right fleet management software will impact a contractor's business by making it easier to properly maintain assets, track and increase utilization, and make smarter purchasing and rental decisions. ■

Bret Kasubke is director, Customer Equipment Solutions at United Rentals, which is the largest equipment rental company in the world. Bret has 20+ years of demonstrated excellence in driving performance improvement. The Customer Fleet Solutions team collaborates with large equipment owners in developing solutions to optimize their owned fleets while lowering their total cost of equipment operations.

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NEW DIGITAL CHECK-IN APPS EMERGE ON CONSTRUCTION SITES TO PROTECT EMPLOYERS AND EMPLOYEES

BY BRIAN JUNGINGER, CONSTRUCTION LITIGATION ATTORNEY, MCINERNEY & DILLON

COVID-19 has led construction companies to adopt new digital check-in apps that keep employees safe and jobsites symptom-free from the virus. Employers are discovering additional benefits with the use of these apps — benefits that may protect them from potential lawsuits.

Today, employers need to make sure that every employee entering a jobsite is symptom free before they start work. If you haven't been on a jobsite that uses one of these new digital check-in apps, it's a simple process that can be beneficial to contractors. Workers point their smartphones at a poster with a QR code on it. They sign-in for their shift, privately answer health questions on their phone, and are immediately notified if they're approved to enter the jobsite. If they're denied, the alert goes to the employee and up the management chain to take the necessary next steps.

Since the health screening data is saved only on the employee's phone, the answers to the questions are protected. Yet, the employer can still securely conduct private contact tracing without having access to the employee's personal health information or any other data on the employee's smartphone. Making contact tracing part of a business contract is key to making it work. This is more effective than a voluntary participation approach.

ADDITIONAL BENEFITS OF DIGITAL SIGN-IN RECORDS

These apps evolved because of the pandemic. Yet the benefits show that digital sign-in will be how construction companies do business moving forward. Some of the additional benefits include:

OSHA recordkeeping: If COVID-19 is traced to a jobsite, a construction company can be at risk of OSHA violations if the proper documentation and reporting requirements are not completed. A digital record of when an employee visits a site, how long they are on the site and that the person passed their health screening test prior to starting work will all be additional evidence that can be used in responding to an OSHA complaint.

Time savings and better recordkeeping: A digital sign-in only takes seconds. This can save time at the start of a shift, save administrative time and avoid employees having to manually enter the same information. That now outdated process of manual entry has always had a high potential for human error that sometimes isn't discovered until after litigation begins.

Provide prevailing wage information to the Department of Industrial Relations (DIR): Working on public works projects requires that the contractors provide prevailing wage information during the project. In addition to providing certified payroll, employers will have a summary of the check-in data to confirm the hours worked by certain employees.

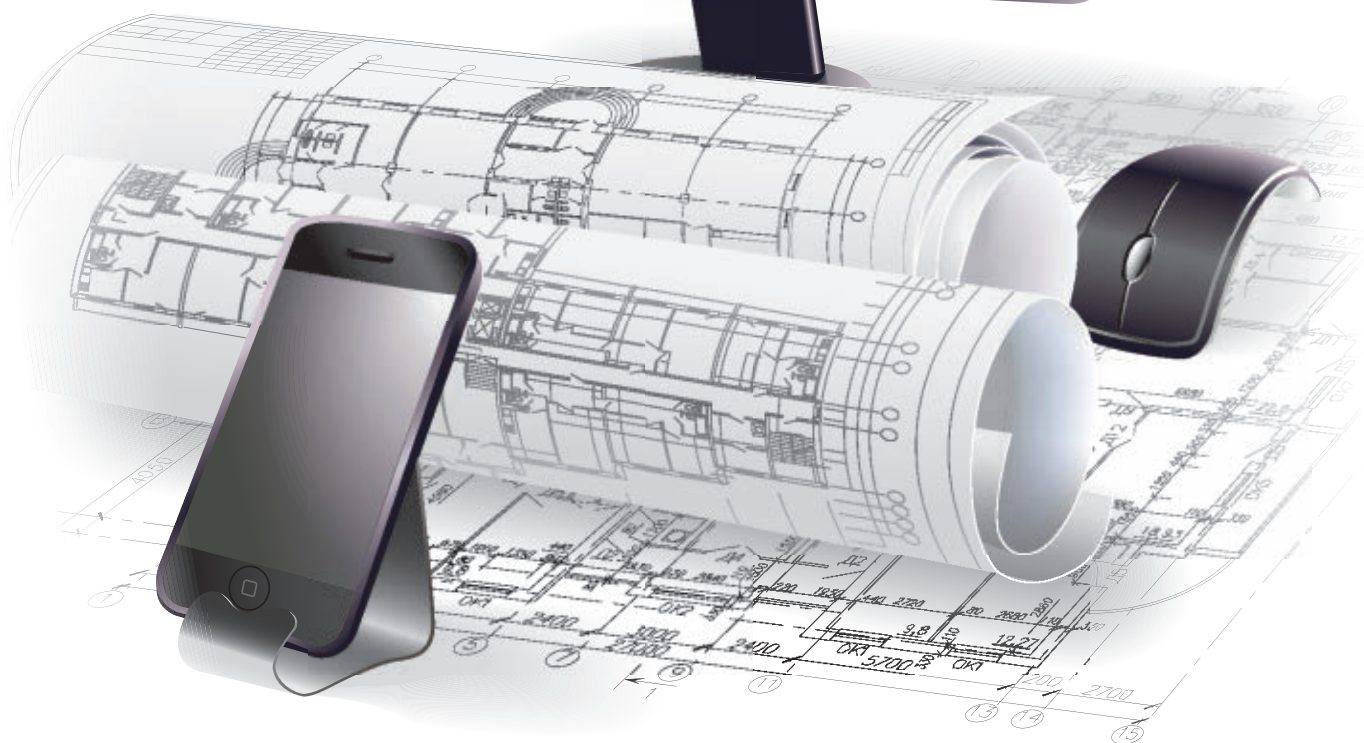
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CAN I GET A CONNECTION?

Streamline Material Flows with a Connected Jobsite



BY DEXTER BACHELDER, VICE PRESIDENT, COMMAND ALKON

The construction industry has long issued paper purchase orders (POs), which, in theory, flow from a buyer to a material supplier to confirm orders for construction materials. They also routinely use manual, paper-based processes to track tickets generated as materials move from plant to jobsite.

But, in an information-intensive industry like construction, paper documents are often a hazard since they can disappear and be difficult — or impossible — to locate, share or distribute in their correct, most recent version. Paper documents can often become damaged or smeared, making them impossible to read and use.

The move from paper-based POs to electronic orders can be a lifesaver for most construction businesses, many of whom are already moving to digitize their paper-based processes for better transparency and increased productivity. Digitizing paper enhances communication. It helps to avoid delays and waste by ensuring all parties involved — including contractors, suppliers, haulers, logistics providers and buyers — are on the same page, working from the most recent document.

TECHNOLOGY FOR DIGITIZATION

Given the number of parties involved in construction projects today, excellent communication and



Digitization is the backbone of a connected jobsite. It orchestrates heavy material movements, job cost tracking, order and yield management, and provides traceability and quality assurance insights. It ultimately generates more timely and accurate data, enabling faster, more intelligent business decisions.

information-sharing are critical to keeping all parties on track. A collaborative platform that connects the construction ecosystem of suppliers and contractors empowers all parties with visibility up and down the supply chain. Each stakeholder connects to the platform to share valuable information, like status of materials within supply chain processes.

Digitization is the backbone of a connected jobsite. It orchestrates heavy material movements, job cost tracking, order and yield management, and provides traceability and quality assurance insights. Information shared digitally across construction project team members boosts productivity, safety and project outcome certainty. Digitization ultimately generates more timely and accurate data, enabling faster, more intelligent business decisions.

Missed or delayed shipments of materials to jobsites can cause the project to be delayed with workers hanging around waiting. If project managers knew that the delivery would be late gained from having visibility into supply chain processes, they could reassign workers or divert another shipment of materials to the jobsite.

A connected jobsite utilizes an electronic material ticket management system that eliminates the dependence on paper tickets which are used to track materials and truck assets. Electronic transactions of these paper-ticket processes help buyers to more efficiently reconcile which goods were accepted against invoices. With quicker invoice reconciliation, faster settlement and payment occurs, making suppliers very happy and more willing to do business with your company.

Tracking materials through the jobsite is more efficient with digitization because paperwork is never lost. Some materials

are fitted with sensors that can be read by Internet of Things (IoT) devices. These devices gather data and send the information to back office processes, like invoice settlement. Contractors can reduce materials and trucking costs because of greater efficiencies gained through automation of the ticketing and invoicing processes.

BENEFITS GAINED FROM A CONNECTED JOBSITE

Modernized transactions via digital formats of certain processes help to improve productivity and materials savings by better managing materials yield. By knowing in real-time when materials leave the plant and enter a jobsite, contractors reduce product and time waste by having their crew and machinery ready to accept and begin working with the materials. Other benefits of digital transactions include:

- Generates an electronic proof of delivery (ePOD) that can be used for compliance documentation and to help with damage claims.
- Streamlines the real-time delivery process.
- Integrates the buying, receiving and accounting for materials to simplify the procure to pay process and speed reconciliation.
- Provides real-time visibility of material quantities and job expenses.
- Proactively provides customers with shipping status and expected delivery times for improved customer service.

COVID-19 AND DIGITIZATION

In today's COVID-19 world, many construction players are having to navigate working remotely from home, fueling the demand for more cloud computing, collaboration services, mobility tools and platforms, and big

data services. Without a digitized platform and tools that connect the construction ecosystem, businesses are hindered by lack of productivity and efficiency. Teams can communicate and collaborate more with digitized solutions, no matter where they are. If access to orders, trucking timecards, material lists and reports are needed, with these tools, your business will have the information it needs to track job, material and labor costs on a daily basis.

By utilizing electronic tickets, operations will stay in sync as the materials pass from order entry to batch results to delivery status to electronic proof of delivery to inspection and test results through invoice and payment processing — all without requiring human hand-offs.

In the wake of the pandemic, construction businesses are finding they can maintain business continuity because of the digital transformation of their operations. Using advanced tools, such as eTicketing solutions, helps firms continue to do business and improve safety, which is imperative in the age of COVID-19. Many companies experienced bottlenecks in their operations as a result of the pandemic. Implementing digital technologies that connect every inch of the construction supply chain ensure that operations can push forward despite the challenges that this virus — and any major supply chain disruption that's to come — presents. ■

Dexter Bachelder is vice president at Command Alkon. Visit www.commandalkon.com for more information.

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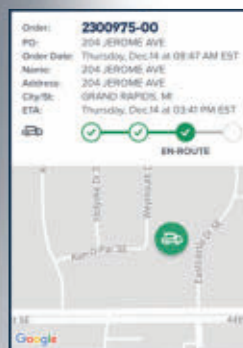
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NEW DIGITAL CHECK-IN...

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Added safety information: Digital sign-in will allow contractors to quickly determine who is on a jobsite, including visitors, in the event of an emergency.

CUSTOMIZED APPS DON'T REQUIRE IT INVOLVEMENT

Depending on the features of the check in app, you can customize the questions for state guidelines. Or you can get the app in different languages to ensure everybody understands the questions and answers accordingly.

As the technology evolves, you can potentially use these apps to issue alerts to employees and site visitors before they go on site. For example, alerting a crew through the digital app to an open trench provides just one more way to convey potential dangers to employees. Reading the alert may be the notice that prevents a catastrophic injury.

The digital check-in process has been a long-time coming for construction. Contractors that aren't using an app should consider getting it now. It protects employees, subcontractors, visitors, and the construction company itself and may avoid lengthy and costly legal disputes. ■

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