

THE WALL OF ORANGE BUILD THE WALL. BUILD SALES.



The energy efficient solution for just about everywhere.





ESSENTIAL SERIES

GENERAL PURPOSE LED BULBS

A Shape

Reflector

PAR

Spotlight

Decorative

Filament



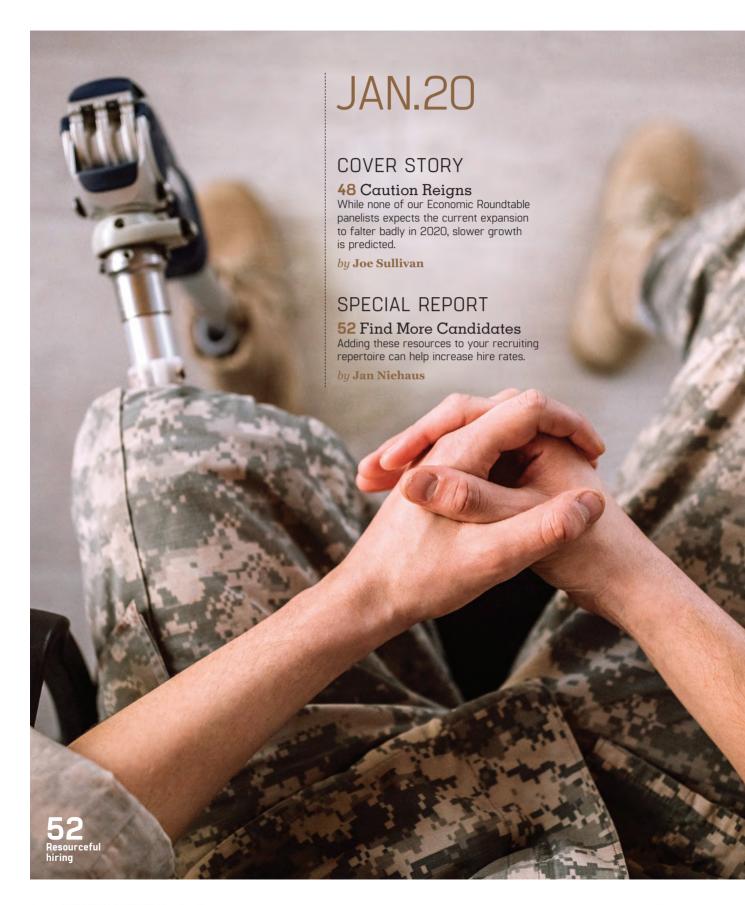




FREE SAMPLES AVAILABLE

Phone: 800-464-2680 | Email: samples@keystonetech.com | Web: keystonetech.com/samples

LED LAMPS | FIXTURES | DRIVERS | LED RETROFIT KITS | BALLASTS



2 the **ELECTRICAL DISTRIBUTOR** • Jan. 20 www.tEDmag.com

SNAP²IT® CONNECTORS

EASIEST CABLE INSERTION • NO TOOLS • SECURE HOLD



Fully assembled, SNAP²IT[®] fittings handle the widest variety of MC cable AND THE NEW MC-PCS cables.

Compared to fittings with a locknut and screw, you can't beat these snap in connectors for time-savings!



P Fits widest range and variety of MC cable 14/2 to 3/3 AC, MC, HCF, MC continuous corrugated aluminum cable and MCI-A cables (steel and aluminum)...including the new MC-PCS cable that combines power and low voltage in the same MC cable

ANY Snap2It Connectors LISTED for MC cable are also LISTED for MC-PCS cable! These products offer the greatest time-savings.

- · Fast, secure snap-on installation
- · Easy to remove, reusable connector

From cable Loosen screw on top. Remove connector from cable. *From box* Slip screwdriver under notch in Snap-Tite® ring. Twist. Remove connector.

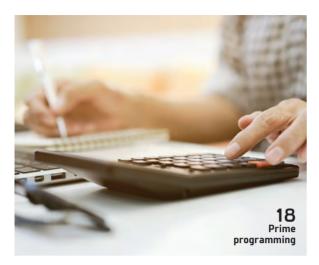
S	CATALOG NUMBER	DESCRIPTION Snap2lt® connectors	CABLE OUTSIDE DIA (OD)
3	4010AST	Snap in, 1/2" KO w insulated throat	.405 to .610
	5010AST	Snap in, 1/2" KO w insulated throat	.580 to .780
	505010AST	Duplex Snap in, 3/4" KO w insulated throat	(2) .590 to .820
	4110ST	Snap in, 1/2" KO	.525 to .705
	414110ST	Duplex Snap in, 1/2" KO	(2) .525 to .640
NEW!	4141107ST	Duplex Snap in, 3/4" KO	(2) .525 to .690



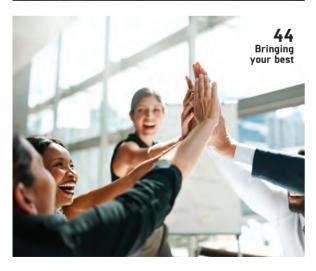
www.aifittings.com Scranton, PA 18517 800/233-4717



into Box!







JAN.20

CURRENT

13 Region Outlook

The NAED Western Region contains several hot spots that are likely to outperform the rest of the country.

22 Project Spotlight

An LED upgrade by North Coast Electric helps Ajinomoto Foods North America in Portland, Ore., rise to the top of the food chain with a sustainable new facility.

28 Research Review

Baird survey panelists report rising revenue but foresee trade and election uncertainty.

BUSINESS

33 Market Focus

As electrical distributors continue to expand the scope of their offerings to customers, energy storage systems may be the next frontier.

36 Tech Watch

A new perspective can turn tech into a profit generator.

38 Business Matters

Getting set up to participate in the NAED Market Data Program isn't a "project" at all.

SFILING

41 Sales Spotlight

Why salespeople must do their best to embrace new technologies—and all of the complications and benefits that come with them.

44 Management

Use the power of the entire team to teach everyone the tactics of the top performers.



PRODUCT KNOWLEDGE

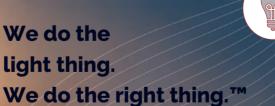
- **56 Electrical:** Control and Automation
- 58 Lighting: Lighting Senior Facilities
- 61 Product Watch: Explosion-Proof Control Stations

+ALSO IN THIS ISSUE 6 President & CEO Note | 8 Chair's Column | 10 Digital Doings | 18 Distributor's Voice | 20 Government Watch
21 Lighting News | 24 Contractor Q&A | 26 Stock Report | 30 Happenings | 37 Millennial Minute | 42 Rep Roundup | 43 On the Bookshelf
46 Best of the Best Coverage | 62 People | 63 Ad Index | 64 Leadership Profile

SATCO NUVO

The only thing larger than our product offering is our commitment to our customer.

Satco, we deliver on product, promise & partnership.





SATCO **LED LAMPS**



SATCO NUVO **FUNCTIONAL**



FUNCTIONAL



SATCO NUVO **DECORATIVE**



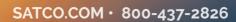
SATCO TRADITIONAL



SATCO COMPONENTS



#





CREATE A WIN-WIN SCENARIO

by Tom Naber

O YOU REMEMBER LIFE BEfore the Internet? Before e-commerce? Back when the bulk of your customers swung by your counter to order the products they needed? Your team did more than make a sale. They established and nurtured relationships. They could educate customers on the latest products, inform them as to items that would be discontinued, and suggest complementary products.

Times have changed. According to recent research, 80% of buyers place their orders via a website—and one out of four B2B buyers orders on mobile devices.

As you know, it becomes tough to give e-commerce customers the same personalized experience they'd get in-store. But there are ways to do itand DATAgility's X-Check Expansion can help.

As you look over your e-commerce site, do a quick gut-check. Ask yourself: Is it easy to find whatever customers need? Does it feel like we know our customers? Does the site help customers solve their problems?

While sometimes those simple questions can yield some complex answers, X-Check Expansion, released in November, helps distributors combat these types of issues. In fact, data from X-Check Expansion can be leveraged in an e-commerce platform to



drive better search results for customers looking to buy online.

The advanced version of this tool creates connections and relationships between more than 400,000 products by 680 different manufacturers-and minimizes customers' effort by displaying information relating to the accessories, upgrades, and parts associated with the product. Additionally, using master electricians as subject matter experts to guide the program, X-Check Expansion can not only find obsolete or discontinued items that have been replaced with new items, but also recommend special tools that may be needed to install a part.

Using this tool creates a win-win scenario as knowing the product relationships helps manufacturers and distributors increase their average order value while ensuring customers get what they want, when they want it.

Learn more by contacting the Member Engagement Team at 888-791-2512 or memberengagement@ naed.org. ■

Naber *is president and CEO of NAED.* He can be reached at tnaber@naed.org.



Vol. 60, No. 1

PUBLISHER Scott Costa scosta@naed.org

EDITOR Misty Byers mbyers@naed.org

ART DIRECTOR Randi Vincent rvincent@naed.org

PRODUCTION EDITOR Karen Linehan klinehan@naed.org

ONLINE EDITOR Nicky Herron nherron@naed.org

EDITORIAL & WEB ASSISTANT Marie Jakle mjakle@naed.org

CIRCULATION ADMINISTRATOR Stephanie Wobbe subscriptions@naed.org

CONTRIBUTING WRITERS

Susan Bloom, Kara Bowlin, Craig DiLouie, Carolyn Heinze, Carol Katarsky, Jan Niehaus, Dan Nitowsky, Joe Nowlan, Irwin Rapoport, Kevin Reed, Ken Simonson, Joe Sullivan, Ken Wax

ADVERTISING

East-Central Region: Rich Ryan P.O. Box 102, Port Clinton OH 43452 (419) 734-5545, Fax: (810) 958-0475 rgrsvc@gmail.com

Western Region: Steve Wafalosky 512 East Washington Street. Chagrin Falls, OH 44022 (440) 247-1060, Fax: (440) 247-1068 stevew@larichadv.com

Southern Region: Gary Lindenberger, Lori Gernand-Kirtley 7007 Winding Walk Drive, Suite 100 Houston, TX 77095 (281) 855-0470, Fax: (281) 855-4219 gl@lindenassoc.com; lg@lindenassoc.com

Southeast Region: Doug Fix 590 Hickory Flat Road, Alpharetta, GA 30004 (770) 740-2078, Fax: (678) 405-3327



AWARDS





Copyright @ 2020 by National Association reserved. Reproduction in whole or in part without written permission is strictly

Prepare for the best IDEA Ever

The NEW **IDEA Connector**SM official go-live date is set for January 31, 2020.

In preparation, we created a portal to help field your questions.

IDEA has prepared the information users need for a smooth transition to the new platform including detail about training and contact information for the Client Solutions Team.

703.562.4600 info@idea4industry.com



Find the FAQ portal here: idea4industry.com/faqs/

CLEAN DATA IS A TEAM EFFORT

by Erin Prinster, guest columnist

According to IBM's estimate, in 2016, it lost \$3.1 trillion due to poor-quality data just in the United States alone. And according to Perspectium, a data integration firm, flawed data costs the national economy \$3 trillion per year and costs companies an astounding 20% of their revenue.

More CIOs are investing additional time into gaining control over organizational data. As an analyst, it can be very challenging to answer questions if the data isn't accurate, especially when the information is used for business decisions. Here are a few thoughts to consider when it comes to improving data quality:

• A simple question isn't so simple.

One of an analyst's duties is to anticipate need. One question usually turns into two or three. A question re-

garding how many customers are served in the West is followed up by one about what they're buying. If that POS data is in another system with different coding, the answer might take longer to find especially if it's merged with a CRM tool.

• Being proactive will serve you better than procrastinating.

I hear a lot of "Oh, it will take longer to find another way" and "I am used to this way" or "I will worry about cleaning it later because I have to answer this now."

Well, later is now!

What if you spent 15 minutes turning a 10-minute process into a 1-minute process? Yes, you will be in the hole a few more times when you run the process, but you'll likely

get that request four more times in the coming weeks so the new process will eventually save time, which can be invested in other tasks.

• Dirty data can be prevented.

Circumstances that create data issues happen in every business. While this is normal, it doesn't mean we can't put forth an effort to improve the quality of our data by implementing processes and procedures and then executing on those action items. These processes have to be part of a com-



pany's strategic plan. If it isn't a priority, it won't happen.

• Ensuring data is accurate is also a team effort.

The people implementing systems need to hear from those pulling the data. Those who pull the data need to understand how it will be used and who will be using it.

More CIOs

additional

time into gaining

tional data. As an

control over organiza-

analyst, it can be very

challenging to answer

questions if the data

isn't accurate, espe-

mation is used for

business decisions.

cially when the infor-

are investing

Those entering the data need to understand how the data will be entered so it is consistent.

• Cleaning your company's data can't be done in silos.

You've got data coming from every direction. First, identify who should be involved and why. If you're thinking about leaving someone out, think again. Anyone who touches data in any way, shape, or form needs to be involved. Then break the process into pieces. Your CEO may not need to be involved in the actual development of the system, but he or she does need to give input on expectations. Does your analyst need to be involved in the memory storage setup?

Not really, but he or she should be involved in discussions about the product to ask the right questions about reporting and analysis capabilities.

If your company approaches cleaning data with these things in mind, it can be done. Attack your plan in phases—and remember: It's a team effort. ■

Prinster is a research and data analyst at NAED. She can be reached at eprinster@naed.org.

the ELECTRICAL DISTRIBUTOR • Jan. 20



gimme five...



your partner for innovation



HYBRID SOLAR AREA LIGHT Powered by the sun and backed-up by line-voltage



RETROFIT KIT
Fixture or retrofit,
connect up to 40 bars
with 1 power feed

LINEAR



HIGH BAY RETROFIT LAMP Replaces up to1000W



TROFFER

TRANSFORMER

Easiest install –

one piece doorkit



HAZARDOUS LOCATION RETROFIT UL approved retrofit for Class 1 Div. 2 fixtures

2019 ASBPE Magazine of the Year

We are proud to receive ASBPE's top award honoring business publications that demonstrate consistent editorial and design quality and provide extraordinary reader service.



WINNER of 107 ASBPE AWARDS [2015-2019]

4 NATIONAL AWARDS: 2019

MAGAZINE OF THE YEAR

DESIGN: Table of Contents | Front Cover Supplement **PRINT:** News Section

19 REGIONAL AWARDS: 2019

DESIGN: Magazine Design | Table of Contents
Opening Spread Illustration | Front Cover Supplement
Front Cover Photo | Front Cover Illustration
Feature Article Design

ONLINE: Original Web Commentary | Web Feature Series Web Feature Article | Podcast Online Single Topic Coverage by a Team

PRINT: Regular Column, Contributed | Feature Article, General Interest | News Section | Individual Profile Special Section | Single Coverage by a Team

+ Keep In Touch ONLINE



facebook

We're working on our social media every day. Visit the *tED* Facebook page, click "Like," and join in the conversations. FIND US AT: facebook.com/tEDmagazine

U TWITTER

From live tweeting at industry events to timely commentary on industry happenings, follow *tED* on Twitter to stay in the know. FOLLOW OUR TWITTER FEED: @tEDmagazine

O INSTAGRAM

What is *tED* up to? From photos from industry events to a look at our headquarters' happenings, check out our Instagram.

EXPLORE OUR INSTAGRAM: tEDmagazine

M EMAIL

Do you have news to share? Send your press releases to *tED* magazine Editor Misty Byers at mbyers@naed.org or tEDmag.com Online Editor Nicky Herron at nherron@naed.org.

🍪 tEDMAG.COM & lightEDMAG.COM

Updated daily, tEDmag.com features headlines on distributor, manufacturer, and people news, while lightEDmag.com offers exclusive features and the latest news and product info from the lighting world.

► TUNE IN TO tEDTV

tEDTV is a powerful library of custom, product, and technology videos that provides the electrical industry with a one-stop repository of educational content. To experience the site, go to tedtv.tedmag.com.

and LISTEN TO OUR PODCAST

Check out the running list of DistributED podcast episodes. Subscribe to stay updated. It can be found by searching "DistributED with tED Magazine" on all platforms, including Spotify, Google Podcasts, and Apple Podcasts.



PUSH-ON CONNECTORS

FOR NON-METALLIC LIQUID-TIGHT CONDUIT



SAVE 40 seconds or *33¢ per push-on connector!

Arlington's push-on connectors offer the fastest, easiest way to install non-metallic liquid-tight conduit, type B.

Our one-piece connectors reduce labor steps and eliminate lost pieces. They ship fully assembled with no disassembly needed – and are removable and reusable.

Save time and money with our user-friendly, straight and 90° push-on connectors.









NON-METALLIC

Catalog Number	Trade Size	Straight	90°
NMLT5	1/2"	V	
MILT905	1/2"		~
MILT7	3/4"	V	
MILT907	3/4"		~
VMLT10	1"	V	
NMLT9010	1"		V





Call for Entries



For more information and details how to enter, go to www.tEDmag.com/best.





Y AND LARGE, THE ECONOMY IN NAED'S WESTern Region reflects the deceleration in the United States as a whole. But the region also contains several hot spots that are likely to out-

perform the rest of the nation again in 2020.

Even though the current economic

expansion is the longest in history, the economy appears to be in little danger of slipping into recession. Job growth should continue, although electrical distributors—along with employers in many other sectors—can expect ongoing difficulty in filling positions as the unemployment rate hovers near a 50-year low.

Although wage growth remains subdued, personal incomes are rising at a faster rate than inflation, enabling consumers to spend more and also pay down debt.

Recent stock market records are adding to consumer buying power and wealth. These factors, combined with surprisingly low mortgage interest rates, should spark a signif-

icant upturn in home construction and sales in 2020.

Despite these favorable trends, the economy is not hitting on all cylinders. Three years of high tariffs, retaliatory measures by countries subjected to those tariffs, and constant uncertainty about the next step in the nation's many trade disputes have contributed to a negative outlook for many agricultural, distribution, manufacturing, and transportation busi-

nesses. In addition, sluggish or slowing growth in many foreign economies is reducing the prospects for multinational firms, export-oriented businesses, and the many sectors that rely, at least in part, on foreign visitors. Thus,



NAED WESTERN REGION INDICATORS									
INDICATORS OF STATE ECONOMIC ACTIVITY:									
	State population July 2017- July 2018	Economic activity index Oct. 2018- Oct. 2019	State and local gov. tax revenue Q2/2018- Q2/2019	Construction employment Oct. 2018- Oct. 2019	Residential building permits JanSept. 2018- JanSept. 2019	Unemployment rate (percent) Oct. 2019			
Alaska	-0.3	1.4	-21.1	1.8	-0.5	6.2			
Arizona	1.7	3.8	8.9	8.9	2.1	4.8			
California	0.4	3.5	9.9	4.0	-11.1	3.9			
Colorado	1.4	4.1	8.4	0.0	-12.5	2.6			
Hawaii	-0.3	1.4	10.7	3.3	-5.1	2.7			
Idaho	2.1	2.9	15.2	2.4	8.3	2.9			
lowa	0.4	1.2	1.6	2.0	-5.6	2.6			
Kansas	0.0	2.9	11.6	1.5	-16.5	3.1			
Minnesota	0.8	1.3	14.9	3.3	0.0	3.2			
Missouri	0.3	1.5	10.7	1.1	-6.3	3.1			
Montana	0.9	3.6	11.1	2.1	-8.2	3.4			
Nebraska	0.6	2.0	16.6	6.7	-5.9	3.1			
Nevada	2.1	4.1	3.4	13.1	14.4	4.1			
New Mexico	0.1	3.3	18.2	11.3	-8.4	4.8			
North Dakota	0.6	2.0	1.3	6.1	-22.4	2.5			
Oklahoma	0.3	1.1	11.3	2.5	20.7	3.3			
Oregon	1.1	3.3	15.1	3.0	11.7	4.1			
South Dakota	1.0	2.5	4.5	3.5	-27.3	3.0			
Texas	1.3	3.8	4.5	6.9	4.6	3.4			
Utah	1.9	5.9	13.9	6.3	3.8	2.5			
Washington	1.5	2.8	-0.8	2.5	5.6	4.5			
Wisconsin	0.4	1.4	10.5	3.7	-12.7	3.3			
Wyoming	-0.2	2.8	24.9	1.4	-4.8	3.8			
United States	0.6	2.8	8.3	2.0	1.3	3.6			

Numbers in red = state's unemployment rate exceeds the U.S. rate or the state's growth rate on other measures falls short of the national rate. Sources: population, state and local government tax revenue, residential building permits: U.S. Census Bureau; economic activity: Federal Reserve Bank of Philadelphia; construction employment, unemployment rate: Bureau of Labor Statistics

NEC SERIES CABLE GLANDS

The Difference is Clear



The **World's first**NEC Certified,
Fully Inspectable,
Elastomeric
Compound Pot

Easier and quicker installation, inspection and maintenance than traditional metallic alternative.









2020 is likely to play out much more positively for electrical distributors with markets tied to homebuilding and consumer spending than for firms oriented toward international markets or business investment in equipment and structures.

To see specifically how the firms throughout the 23 states in NAED's Western Region will be affected by the trends above, it is helpful to compare a range of indicators. The table on page 14 shows six measures relevant to different business segments: the unemployment rate for the United States and for each state in the NAED Western Region, along with the yearover-year percentage change in five other markers. A number is red if a state's unemployment rate exceeds the U.S. rate or if the state's growth rate on other measures falls short of the national rate.

1. State population change.

Population growth drives demand for many types of goods and services supplied by electrical distributors. It also supports a growing labor supply and revenues for state and local governments, as well as demand for public services.

Population growth has been decelerating. By 2018, U.S. population growth had slowed to .62%, about two-thirds of the growth rate during the previous decade and the slowest since the Great Depression.

Western Region states display a wide range of population growth. Seven of the eight fastest-growing states between July 2017 and July 2018 were in the West. The top three—Idaho, Nevada, and Utah—had growth rates more than triple the national average. At the low end, three western states—Alaska, Hawaii, and Wyoming—were among nine states nationwide that lost population in 2018.

For the most part, these patterns have held through much of the decade, and they provide a very general guide as to which states will offer above- and below-average populationrelated prospects for electrical distributors in 2020.

But it is also instructive to see which states have significantly different growth rates from earlier years. California stands out: Its population growth slumped from .9% as recently as 2014 to .4% in 2018. The high cost of housing, horrendous commuting times, difficult business conditions, and frequent natural disasters all appear to be dampening population growth and dimming the outlook for businesses that depend on it.

Washington and Oregon have also experienced outsized increases in housing costs and traffic congestion in their major metropolitan areas. Their population growth has decelerated even more than California's, although they still rank as high-growth states.

Perhaps not surprisingly, the pace of population growth has picked up markedly in the states just to the east of the West Coast, including Arizona, Colorado, Idaho, Nevada, and Utah.

2. Economic growth. Population change affects business prospects over an extended period. In the short run, the opportunities a state offers are more likely to be a product of its economic condition.

The Federal Reserve Bank of Philadelphia compiles a monthly coincident economic activity index that combines four state-level measures of current activity into a single number. These indicators are nonfarm payroll employment, the unemployment rate, average hours worked in manufacturing, and wage and salary disbursements deflated by the consumer price index (U.S. city average).

The national index increased at a 2.8% rate from October 2018 to October 2019. The 23 NAED Western Region states all had positive growth rates, but there were notable differences among them. Utah recorded a 5.9% rate, more than double the national rate, and Colorado and Nevada's index numbers rose 4.1%. The lowest readings in the region

occurred in Oklahoma (1.1% growth), Iowa (1.2%), and Minnesota (1.3%).

3. Unemployment rates. The national unemployment rate has remained below 4% for more than two years and hit a 50-year low of 3.6% in the fall of 2019. Most states have also recorded reduced unemployment, with some hitting all-time lows, such as California, where the rate dropped to 3.9% in October. The lowest rate among the states in NAED's Western Region that month—2.5%—was in North Dakota and Utah, closely followed by Colorado and Iowa (2.6% each). Alaska had the nation's highest unemployment rate, 6.2%

The national rate was virtually unchanged from one year earlier. The Bureau of Labor Statistics (BLS) reported that the rate declined by 1 percentage point in Utah and .7 percentage points in Colorado, a sign that workers may be especially hard to find in those states.

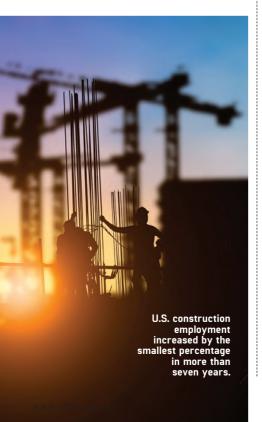
State population, economic activity, and unemployment rates give general indications of a state's economic health and how it is changing or how



it compares with the nation and other states. In addition, there are sectorspecific measures that may be more revealing for electrical distributors serving particular end-markets, such as construction, housing, and state and local government.

4. Construction. The BLS posts data on construction employment by state each month. Looking at the yearover-year percentage change in construction is useful for spotting states with growth opportunities.

From October 2018 to October 2019, U.S. construction employment increased 2%. That was the smallest percentage increase in more than seven years, suggesting that industry growth is slowing. But the industry is still hiring at a steeper rate than the 1.4% growth rate for total nonfarm payroll employment. The top three states for percentage growth in construction were in the NAED Western Region: Nevada (13.1%), New Mexico (11.3%), and Arizona (8.9%). Among states that added the largest number of construction employees over those 12 months, four of the top five were in





Nationally, permits for new residential construction saw a meager increase.

the region: Texas, California, Arizona, and Nevada.

None of the eight states that shed construction jobs over the year ending in October were in the West, although construction employment was unchanged in Colorado. Thus, based on employment, it appears construction remains a positive market for electrical distributors throughout the region.

5. Housing. For electrical distributors that serve the homebuilding and residential remodeling sectors, residential building permits are a more targeted indicator than employment figures that cover all types of construction. The Census Bureau reports on permits each month, but the numbers tend to be volatile, so it is more useful to compare a longer period, such as the first nine months of 2019 combined compared with January 2018 to September 2018 combined.

Nationally, permits for new residential construction, including apartments, townhouses, and detached houses, increased a meager 1.3% over that span. There were double-digit swings in both directions among western states. The largest pickup occurred in Oklahoma (20.7%), followed by Nevada (14.4%) and Oregon (11.7%). Permitting tumbled in South Dakota (-27.3%) and North Dakota (-22.4%),

while there were smaller decreases in a dozen other NAED Western Region states. However, activity should pick up in states that score well on broader indicators when the house-hunting and homebuilding season arrives in the spring.

6. State and local government tax revenue. Another market that is important to many electrical distributors is state and local governments, including school districts. Their capital budgets, as well as spending on maintenance, repairs, and operations, depend on tax revenues, either directly for annual expenditures or to repay bonds. Therefore, it is helpful to examine the annual change in tax revenue, a series the Census Bureau updates quarterly.

Nationwide, state and local tax revenue from all sources increased 8.3% from the second quarter of 2018 to the spring of 2019. Thirteen NAED Western Region states experienced double-digit growth in tax revenues, led by Wyoming (24.9%), and growth outpaced the national rate in all but six western states. Only Washington and Alaska had a dip in tax revenues.

Summing Up

These indicators are just thatindicators of recent or current conditions and changes—not surefire predictors of future trends. Nevertheless, states that score high (or low) on such a diverse set of measures are likely to provide significantly greater (or lesser) opportunities for electrical distributors (and other businesses) in the months ahead.

Idaho and Utah both outperformed the national averages on all six of these indicators. Both states have been near the top in population growth for several years. They have plenty of land for building houses and for businesses to locate and expand and are often rated as relatively business-friendly.

Four states topped the national averages on all but one measure:

 Arizona and Oregon missed on the unemployment rate in October

CURRENT / DISTRIBUTOR'S VOICE

Prime Programming

A few purchasing program best practices that can make a big difference.

ON'T LET THE SONGS you have just been suffering through on the radio fool you. The most wonderful time of the year is not Christmas; it's program season! January marks not only when all those hard-earned checks start rolling in for the previous year's buys, but also when we have a chance to angle for new and better programs in the coming year.

This is not my first column on best practice regarding purchasing programs, but I do have a few more hints to share to make sure you get the most bang for your buck.

As I sit here with my slide rule and abacus, reading the fine print on everything I'm about to sign for this coming year's programs, I can't help circling certain loopholes or underlining things I do not agree with. I lead a small national syndicate of purchasing agents and operation heads, a merry band of distributors from a scattering of

supply houses across the nation. Over the years I have been taken aback when I hear others describe programs as "icing on the cake" and a formality they just sign.

In actuality, these programs are a revenue stream and, in certain cases, could be the only money made on a line. So they aren't icing—but rather the actual cake.

As I suffer through an entire year making roughly 7% on average on my cable sales in an ultra-competitive commodity market, sometimes that rebate money is the only money I'm making on a project.

Sure, the sales order shows 7% gross margin. But then I give away a 2% cash discount when the customer pays on time and add in whatever percentage the outside salesperson takes, so I'm left with a sale and not much else—that is, until all those purchasing dollars start adding up. Then it becomes a



giant piggy bank that finally gets cracked open once we pop the champagne cork to usher in the new year.

As for those helpful hints? Here are three:

• Hint No. 1: If you aren't doing the buying yet you're signing these programs, make sure those who are cutting POs know who you go to market with in the coming year. A program is just a piece of paper unless you can take advantage of it. It is pure potential, but it likely needs

to be nurtured and encouraged along the way.

We entrust certain members of our sales staff to quote their own projects. For this, I create a list of preferred vendors: those that we have a strong alliance with and offer the best dating, cash discounts, and rebates. While we do not share that information with staff, we do create a list ranked in order of who to call first. They only progress past our No. 1 in a segment if they strike out. But

(4.8% in Arizona and 4.1% in Oregon vs. 3.6% nationally).

• Montana slightly outpaced U.S. averages except regarding residential building permits (a statewide decrease of 8.2% year to date through September vs. a national increase of 1.3%).

• Texas was ahead of the national averages on every indicator except year-over-year increase in tax revenues (4.5% vs. 8.3% nationwide).

Based on these markers, the toughest conditions were in Alaska, which trailed U.S. averages for all six indicators. Every other state was above average on at least four measures. ■

Simonson is chief economist for the Associated General Contractors of America. He can be reached at solomonsimonson@gmail.com.



No. 2 will always be a vendor we have good terms and rebates with as well.

• Hint No. 2: Know what kind of program you are signing. The best of the lot will pay out based on dollar No. 1 and include a bonus trigger for certain growth.

We have a few branches, and I have noticed that some programs do not roll growth into one file but rather base it on individual account numbers I have set up for my different branches. As we often

combine all needs for each branch into one larger purchase order, it is insanely easy to steer buying toward certain account numbers to maximize growth. Every year I have a sacrificial lamb set up based on the previous year's growth target.

That growth trigger pays out on all combined payments, so a little nut and shell gaming throughout the year can pay big dividends in the end. Bringing a 4% rebate to 6% can be huge

depending on the dollars you flush through the program. That is 50% more money at year end. And who doesn't want more money?

These programs are almost always prepackaged and served up generically to us all. If you are just signing what you were given, you aren't playing the game correctly. Why would you sign up for the same one-size-fits-all program at the local hardware store? If they are paid out flatly on their dozens of dollars in purchases, I want more as I direct tens of millions through my stock.

• Hint No. 3: A program can often be negotiated. If you don't agree with something, speak up. Did you have a major project inflate your previous year's totals? Ask to get that nonrecurring business tossed out so you can actually make your growth bonus. Always save copies of what you sign and keep them for a few years. Many times, I have caught shrinkage in programs and used their own previous program to push back: "Why am I only getting back three points this year, when I got five last year?"

And don't just wait for programs to come to you. Run your top 100 vendors to see which have no rebates set up with your company. If you are aoina to market with a certain brand, there should be some sort of "thank you" for your efforts. And if you do get shut out on your request for a program, ask for a cash discount or simply better terms. As an independent, we are self-financed. Often an extra month or two to pay is worth more than a 1% discount when paying within terms.

I hate to use the expression "There is more than one way to skin a cat" because 1) not only is it gross, but also 2) why would you want to skin a cat? And if you really had to, isn't one way good enough? So let's just say that there is more than one way to ice a cake. And if you have just been living off the frosting, those empty calories won't fill you up nearly as much as the actual cake will. ■

Kevin Reed is director of purchasing and warehouse operations at Paramont EO in Chicago. He can be reached at info@paramont-eo.com.

OSHA LOCKOUT/TAGOUT UNDER REVIEW

OSHA looks into updating its Control of Hazardous Energy regulations.

by Joe Nowlan

SHA RECENTLY CONCLUDED A REQUEST FOR information (RFI) phase as part of an eventual rewriting and modernizing of its Control of Hazardous Energy (lockout/tagout) regulations. The RFI gathered feedback, opinions, and technology updates that OSHA will take under advisement as it looks into updating those regulations.

On its website, OSHA defines hazardous energy as "energy sources including electrical, mechanical, hydraulic, pneumatic...or other sources in machines and equipment [that] can be hazardous to workers. During the servicing and maintenance of machines and equipment, the unexpected startup or release of stored energy can result in serious injury or death."

Much of the machinery and related equipment that OSHA refers to—energy-isolating devices (EIDs)—still have to be turned off manually for cleaning or general maintenance.

It is hoped that, pending OSHA approval, the more efficient control circuit-type devices will replace most energy-isolating devices.

"Now we have motors that are electronically controlled," said Alex Ayers of the Family Business Coalition. "And with that electronic control, it's no longer that there is power going to it or not; it's how the power is going to it. We can use these circuits to do the same thing that an old physical switch would have done."

It isn't unusual for OSHA to re-examine its various rules

and regulations, especially if technology has made it necessary.

"OSHA has a calendar where they start looking at specific regulations to make sure that the standard still applies for the technology that exists," Ayers explained. "That's the big change this time. Machines can be shut down electronically rather than physically disconnecting the power source."

Ayers noted that as things stand now, the OSHA standard hasn't changed much, but innovations are fueling the potential updates.

"Manufacturers are now saying, 'We can electronically control these circuits and we're going to start producing them.' That eventually leads to OSHA seeing that these innovations are out there and gathering some information to see if they should



the ELECTRICAL DISTRIBUTOR • Jan. 20

change the regulation," he explained.

Safety is the primary consideration, Ayers said. OSHA has estimated that companies and their employees that follow recommended procedures can prevent more than 50,000 injuries and as many as 120 deaths each year.

"Another issue is that to follow the procedure with the physical disruption devices, it sometimes can mean more employee training is necessary," Ayers said. "These electronically controlled devices are much simpler."

While there is optimism that the OSHA regulations will eventually be revised in favor of the electric devices, it will take time, Ayers cautioned.

"There are only so many hours in the week for OSHA to look at regulations and update them, and unfortunately, it will still be a while before the standard can be updated," he said. Patience should be rewarded, however, as Ayers thinks it's likely that OSHA will rewrite the standards and regulations. "This one is fairly noncontroversial so I don't think it will be slowed down much; it contains a great deal of common sense," he said.

Nowlan is a Boston-based freelance writer/editor and author. He can be reached at jcnowlan@msn.com.

CURRENT / LIGHTING NEWS

THE DOE STUDIES WHITE-TUNABLE CLASSROOM LIGHTING

In September 2018 and

April 2019, the DOE published a Pacific Northwest National Laboratory (PNNL) report evaluating a trial installation of tunable-white lighting systems in three classrooms at an elementary school in Folsom, Calif. The evaluation was conducted as part of the DOE's GATEWAY program.

PNNL's researchers determined that at full output, the LED lighting systems generated 46% energy savings compared with the previous fluorescent system, while producing similar light levels. Energy savings increased depending on teacher use of provided dimming controls.

Tunable-white lighting systems combine the high efficacy of LED lighting with dimming capability as well as the ability to adjust correlated CCT from warm to cool white. At the ele-

mentary school, the August 2017 trial installation of tunable-white lighting was intended to provide an understanding of both its energy-savings potential and potential influence on student health and academic performance, particularly those with autism.

In each classroom, recessed 2x2' tunable-white LED luminaires replaced existing two-lamp T8 fluorescent recessed luminaires, while a 12' tunablewhite LED surface-mounted wall wash luminaire was installed above the whiteboard. A touch-sensitive, wall-mounted, preset DMX512 controller enabled independent dimming and CCT adjustment of the general and whiteboard lighting. Finelite provided both the luminaires and controls for the trial installation.

Energy savings were monitored during the school

year, and savings of 48% to 69% during a typical day were found based on how teachers used the controls. Actual savings will be somewhat less due to the DMX-controlled LED drivers drawing a small amount of power during the off state.

Finelite provided additional hardware and software to log teacher use of the controls, generating usage profiles that varied by teacher. For example, the teachers in the autism spectrum disorder classrooms often used the controller's presets and slider bars to adjust and customize light level and color, while general-education teachers primarily relied on default on/off.

"The teachers viewed the preset lighting options as particularly beneficial because they were quick to implement and noted that the presets were a way to get students' attention or cue them to transition between certain activities," PNNL noted in its report. "According to the teachers, the lights were more effective in getting students' attention than any other method they had tried. They considered the lighting system's dimmability to be particularly valuable, with color tunability seen as a secondary benefit. The individual differences between teachers in their use of controls showed the opportunity that tunable LED lighting systems can provide for customizing the educational setting."

While implementation was different in the three classrooms, the teachers agreed that the LED lighting system provided an improved environment for them and their students, while saving energy.

Find the report at bit.ly/2IpgkI8. ■

Craig DiLouie, *LC*, is principal of Zing Communications (zinginc.com). Reach him at cdilouie@zinginc.com.



FOOD FOR THOUGHT

An LED upgrade by North Coast Electric helps Ajinomoto Foods North America in Portland, Ore., rise to the top of the food chain with a sustainable new facility.

by Susan Bloom

LEADING MANUFACTURER IN THE FROZEN FOOD industry, Ajinomoto Foods North America (AFNA) offers products spanning across the largest categories of ethnic frozen foods—from Mexican to Italian to Asian—across every distribution channel, including food service, grocery, warehouse club, and custom manufacturing. The company operates eight factories and two main offices in the United States and is supported by more than 2,500 employees working around the clock.

In addition to promoting such values as "Eat Well, Live Well," AFNA is committed to reducing its carbon footprint and operating in an environmentally responsible way. This corporate directive recently led its production facility in Portland, Ore., to complete an LED lighting upgrade with the support of North Coast Electric, a Sonepar company, and LED manufacturers Holophane, LEDVANCE, Lumicon, and Lutron.

According to Mark Greene, vice president of North Coast Electric in Estacada, Ore., "One of our salespeople was calling on AFNA to support its MRO needs, but we also listen to our customers' needs, discuss their goals, and share opportunities to save energy and money." Staffed by a team of nine, he said, "Our Energy Solutions division is a resource available to all of our salespeople and we sent one of our specialists to AFNA once we saw opportunities to improve lighting quality and costs within its two-story, 108,000-square-foot facility."

"Our employees work with raw meat and sanitize the facility every night, so lights can get hit in the washing process," explained Khaled Abdel-Rahim, a plant project

22 the ELECTRICAL DISTRIBUTOR • Jan. 20 www.tEDmaq.com





Compliance and Safety Achieved with LED Technology

In today's world of food processing, keeping food contamination-free, employee safety and compliance are crucial. Holophane provides LED lighting that divulges the true state of sanitation, by ensuring food is processed in a clean environment, all while reducing energy costs.

Visit www.holophane.com for complete details.



Vantage LED



To better help electrical distributors respond to the needs of electrical contractors, "Contractor Q&A" features remarks from real contractors from around the country. Responding are Sonny Boggs, owner of Boggs Electric in Grants Pass, Ore., and Frank Mishler, co-owner of Midlakes Electric in Warsaw, Ind. This month we asked:

DO YOU EXPECT THE 2020 ELECTION TO AFFECT BUSINESS THIS YEAR? WHY OR WHY NOT?

Boggs: It depends on whether Trump is elected or not. I would like to see Trump get re-elected as the economy is booming right now—it's gone off the charts and I've seen an increase of 400% since 2016. Our clients have more money to update existing systems and install new ones. Be it for residential, commercial, or industrial, the phone is ringing off the hook every day and there is no end to it. Times are good now.

If Trump is re-elected the economy will keep going as it is. He's doing a lot of great things. If the Democrats are elected and their power is back, the country will go in reverse. We're going full steam ahead and if the Democrats somehow get in, it will come to a screeching halt. What we had with eight years of Obama was less than 1% growth, and we have 4% with Trump.

Mishler: Elections sometimes prompt people to either spend or save money. I don't see a big tide on the horizon where if something happened, it will drastically affect the electrical world. Some of the large companies that thrive on new home construction might feel the pressure of the election indecision, while others that have been driven through service are doing well—when your electrical system guits working, you're going to have it fixed.

Our business has continued to grow since 2016. More people are willing to do the extra projects. I've seen a lot of people feel comfortable spending money again. They're hurrying up and getting stuff done, but I don't know if it's election driven or wanting to get things done before the weather gets really cold. There's tons of work and everyone is booked. I haven't seen any hesitance to spend money in our rural community.

Send your questions to "tED" Editor Misty Byers at mbyers@naed.org.

engineer at AFNA's Portland facility, which employs 300 people and runs two production shifts each day and one sanitation shift each night.

"In our high wash-down environment, lights are blowing out all the time and some are difficult to access," Abdel-Rahim said. "In addition, over the nearly 30 years since our building was first constructed, some of the lighting circuitry made no sense and we weren't exactly sure what would happen if we turned off certain circuits." Despite the need for a lighting overhaul, however, "Our production was in too high of a demand to shut down, so we needed a plan that would map out installation windows where there were opportunities." he added.

Neil Schilling, North Coast energy solutions manager for Oregon, agreed that AFNA would benefit from a lighting upgrade but noted that the conditions were challenging. The facility's previous lighting consisted of several hundred 400W HID high-bays and 1,500 fluorescent T8 and T5 lamps.

"Light levels in certain areas were low," he said. "With only one or two in-house electricians, the plant had to subcontract out some of its lighting maintenance activities, and charges for lamp and ballast change-outs were significant. In addition, because AFNA's team sanitized the production floor every night with high-pressure wash-down hoses, the new lighting had to be either vaportight or gasket sealed in some areas."

On the plus side, the corporate office was very supportive of an upgrade. "One of AFNA's corporate mandates from its Tokyo headquarters was that each facility reduce its energy consumed per pound of product made," Schilling said.

"As part of our company's 'Shared Values,' we want to reduce our operation's impact on the environment and all facilities were asked to convert to LED technology by 2020," confirmed Abdel-Rahim.

After conducting a thorough light-

the ELECTRICAL DISTRIBUTOR • Jan. 20

ing audit, Schilling designed a new lighting configuration for the plant that involved specialized products from several LED manufacturers. "We used Lumecon LED panels in production areas, Lutron lighting controls in 2x4´ office troffers, and linear vaportight LED fixtures from Holophane throughout the production areas; in addition, we also used some LED-VANCE wallpacks and area lights outside," Schilling said. The lighting system is designed to last 100,000 to 120,000 hours and en-

sure a safer, betterlit, and more energyefficient space. To address the access issues that existed given the facility's 24/7/365 operation, "Ken Dale of A&D Electric in Portland, Ore., worked most weekends for a year to complete the installation," Schilling said.

Rewarding Results

The job was ultimately completed on May 30, 2019, and was followed

by AFNA's receipt of a significant rebate from the Energy Trust of Oregon, thanks to the energy-efficient design, which enabled some reduction in fixture count.

"The upgrade saved more than 1 million kWh per year, reduced the plant's lighting kWh load by 74%, and delivered a less-than-three-year payback," Schilling said. "We also improved lighting levels by over 35%, from footcandle measures as low as 24 in some areas to an average of 38 to 40 in all spaces, and the plant's lighting now looks crisp and bright."

"Our space is so much brighter now and visibility has noticeably increased in our production areas," agreed Abdel-Rahim. "It's created a much brighter and safer environment for our employees, and we're definitely seeing the savings on our monthly energy bills."

As for AFNA's distributor partner, "North Coast was fantastic," Abdel-Rahim confirmed. "Being able to procure from one source and have them oversee delivery, identify the right products, interact with suppliers, help the contractor, manage the project, and oversee our rebate application gave me great confidence and took a huge load off our plate. We're currently working with North Coast on

Our space

is so much

and visibility has

in our production

areas. It's created a

much brighter and

our employees, and

we're definitely see-

safer environment for

ing the savings on our

Ajinomoto Foods North America

-KHALED ABDEL-RAHIM,

monthly energy bills.

noticeably increased

brighter now

other projects because they were such great partners."

As AFNA takes pride in pursuing sustainable products and practices, "It feels great to have played our part in boosting efficiency and positively impacting the environment," said Abdel-Rahim.

"I've completed more than 500 lighting projects in the Pacific Northwest and this was

one of the more complex projects in that it required detailed project management every week," Schilling noted. "However, the customer and contractor were great to work with and the Ajinomoto team was thrilled with the results—no maintenance for 10 years, significant energy savings and lightlevel improvements, and all of it aligned with their corporate values. It's very rewarding to have helped position the plant for a more energy-efficient future."

"Our Energy Solutions division brings a lot of joy at North Coast; we don't just sell projects—we deliver win-win solutions," added Greene.

Bloom is a 25-year veteran of the lighting and electrical products industry. Reach her at susan.bloom.chester@gmail.com.



Fixtures come with a 10-year

THE WORD IS OUT! www.slgus.com/tED

limited warranty

POSITIVES CONTINUE DESPITE POST-TRADE CONFLICT

Despite trade turbulence, markets end solidly in the black.

HE tED STOCK INDEX WEATHERED THE TRADE CONflict between the United States and China and emerged in positive terrain for the Aug. 30 to Oct. 31, 2019, session. The Institute for Supply Management reported that factory activity contracted in August for

the first time since August 2016. The reading fell to 49.1 from July's 51.2; in September, it slid to 47.8. The Commerce Department reported that U.S. retail sales rose .4% in August compared with July's jump of .8%. Economists surveyed by Reuters expected a gain of .2%.

The Labor Department reported that job openings fell 1.7% in August, as employers advertised 7.1 million jobs from the 7.2 million available in the previous month, marking the third consecutive monthly decline. As October began, the department noted that employers added 136,000 jobs in September, enough to send the unemployment rate down to 3.5%, the lowest in five decades. The Conference Board's

consumer confidence October index fell to 125.9 from September's 126.3, down for the third straight month. However, the jobs report fueled our strong close. "This was an unambiguously strong report," said Kathy Bostjancic, chief U.S. financial economist at Oxford Economics. "I think the ongoing strength of the labor market helps explain and support the Fed's leaning in to pause the rate cut cycle for now."

tED Index Highlights

• **Top dollar gainer.** Despite missing earnings and revenue estimates for its third quarter, shares of W.W. Grainger (GWW) soared 35.19 points (or 12.86%) and

closed at 308.84. GWW posted net income of \$4.26 per share and revenue of \$2.95 billion. The consensus estimate from analysts polled by Zacks was \$4.44 per share, and revenues were off by .09%. GWW's board declared a dividend of \$1.44 per share. It is payable on Dec. 1 to share-

holders of record as of Nov. 11. GWW was the top dollar gainer.

- Top dollar loser. Danaher (DHR) beat on third-quarter earnings, but its outlook pummeled share price, and DHR fell 4.27 points (or 3.01%). Net income was \$648.4 million (or \$.89 per share). Adjusted for one-time items, DHR earned \$1.16 per share. Sales were \$5.04 billion. Analysts polled by FactSet expected earnings of \$1.15 per share and revenue of \$5.02 billion. The company lowered its fourth-quarter earnings per share to \$1.32 from \$1.35 vs. the estimate of \$1.37 per share anticipated by analysts surveyed by FactSet. Ending at 137.82, DHR was the top dollar loser.
- Top percentage gainer. News that Anixter (AXE) will be acquired by private equity firm Clayton, Dubilier & Rice sent shares ahead 22.78 points (or 37.99%). The all-cash deal, including debt, is expected to close in Q1 2020 and is valued at about \$3.8 billion. AXE also beat third-quarter earnings estimates, earning \$1.92 per share, adjusted for one-time items. Revenue was \$2.22 billion. Analysts polled by Zacks expected earnings of \$1.70 per share, but revenue was down by 1.02% from expectations. Ending at 82.75, AXE was the top percentage gainer. ■

Information *and chart on the opposite page are provided by Trade Trends. For more information*, *call* 509-280-3896.



tED STOCK INDEX: TOP GAINERS & LOSERS						
Top dollar gainer	W.W. Grainger	\$35.19				
Top dollar loser	Danahar	\$-4.27				
Top percentage gainer	Anixter International	37.99%				
Top percentage loser	Houston Wire & Cable	-5.97%				

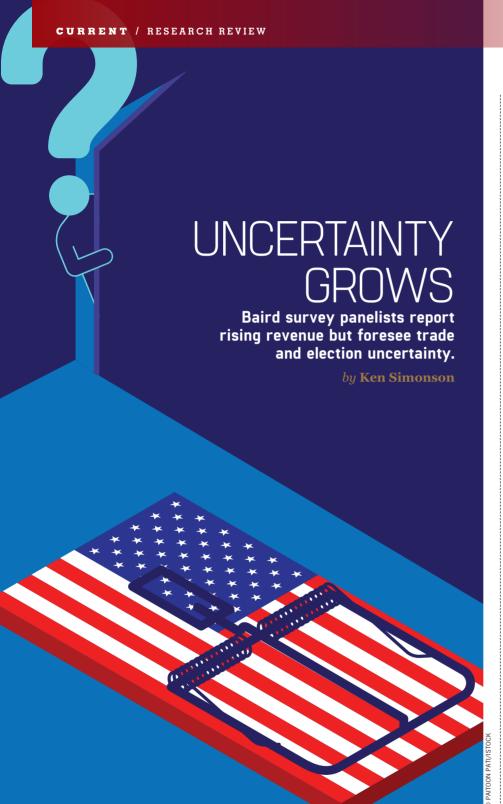
MARKET RECAP					
Advancers	25				
Decliners	4				
Unchanged	0				

the ELECTRICAL DISTRIBUTOR • Jan. 20

Exchange	Ticker symbol	Company name	\$ Price 10/31/19	\$ Price 8/30/19	\$ Net change	Percent change	52-week \$ high	52-week \$ low
NYSE	MMM	3M	164.99	161.72	3.27	2.02	219.75	150.58
NYSE	ABB	ABB	20.99	19.02	1.97	10.36	21.19	17.71
NYSE	AYI	Acuity Brands	124.79	125.41	-0.62	-0.49	147.44	103.48
NYSE	AXE	Anixter International	82.75	59.97	22.78	37.99	84.10	50.05
NYSE	AIT	Applied Industrial Technologies	59.84	53.39	6.45	12.08	70.41	49.45
NYSE	ATKR	Atkore International Group	34.70	29.01	5.69	19.61	35.23	17.47
NYSE	BDC	Belden	51.28	45.61	5.67	12.43	64.33	37.79
NASD	CREE	Cree	47.73	42.93	4.80	11.18	69.21	38.40
NYSE	DHR	Danaher	137.82	142.09	-4.27	-3.01	147.33	94.59
NYSE	ETN	Eaton	87.11	80.72	6.39	7.92	89.45	64.46
NYSE	EMR	Emerson Electric	70.15	59.59	10.56	17.72	73.24	55.39
NASD	WIRE	Encore Wire	56.20	53.99	2.21	4.09	62.08	44.22
OTC	HMDPF	Hammond Power Solutions	6.21	6.33	-0.12	-1.90	6.33	4.07
NYSE	HON	Honeywell International	172.73	164.62	8.11	4.93	178.47	123.48
NASD	HWCC	Houston Wire & Cable	4.25	4.52	-0.27	-5.97	7.04	3.55
NYSE	HUBB	Hubbell	141.70	131.14	10.56	8.05	144.36	91.88
NASD	LFUS	Littelfuse	175.57	156.07	19.50	12.49	206.00	149.80
NASD	LYTS	LSI Industries	5.19	4.47	0.72	16.11	5.50	2.48
OTC	OSAGF	OSRAM Licht	43.84	40.65	3.19	7.85	47.01	29.00
NYSE	OMI	Owens & Minor	6.73	5.08	1.65	32.48	9.52	2.43
OTC	PCRFY	Panasonic	8.46	7.75	0.71	9.16	10.69	7.46
NASD	PKOH	Park-Ohio Holdings	30.76	27.19	3.57	13.13	38.77	25.74
NYSE	ROK	Rockwell Automation	171.99	152.79	19.20	12.57	191.48	141.46
OTC	SMAWF	Siemens	114.20	98.69	15.51	15.72	121.14	93.70
NYSE	TXT	Textron	46.09	45.00	1.09	2.42	58.00	42.30
OTC	TOSYY	Toshiba	16.97	15.56	1.41	9.06	17.69	12.90
NYSE	WS0	Watsco	176.30	163.55	12.75	7.80	178.29	131.88
NYSE	WCC	WESCO International	50.15	45.08	5.07	11.25	57.94	42.03
NYSE	GWW	W.W. Grainger	308.84	273.65	35.19	12.86	321.07	255.09

INDEX WATCH				
Index	\$ Price 10/31/19	\$ Price 8/30/19	\$ Net change	% Change
tED Stock Index	2,019.98	1,893.56	126.42	6.68
Dow Jones Industrial Average	27,046.23	26,403.28	642.95	2.44
S&P 500 Index	3,037.56	2,926.46	111.10	3.80
Nasdaq Composite	8,292.36	7,962.88	329.48	4.14

www.tEDmag.com Jan. 20 • the **ELECTRICAL DISTRIBUTOR** 27



EVENUE GROWTH REBOUNDED FOR ELECTRICAL AND DATACOM FIRMS in Q3 2019, despite a deterioration in pricing growth. However, both types of firms foresee slower revenue growth in Q4 and in 2020, according to the latest survey that securities analyst Robert W. Baird & Co. conducted in partnership with *tED*.

The Q3 survey covered 102 respondents with aggregate annual revenue of \$19 billion, including 63 distributors, 26 manufacturers, and 13 others. Four-

fifths of the firms are electrical only; the remainder—referred to in this article as datacom firms—are mixed electrical/datacom, except for one datacom-only firm.

The respondents are predominately small businesses. Just under half (49%) of the firms had revenues of \$25 million or less, including 28% that reported revenues below \$10 million. Approximately one-fourth (24%) had revenues of \$26 million to \$100 million, while slightly more firms (28%) had revenues exceeding \$100 million.

Respondents are widely dispersed geographically. The Midwest is home to the most respondents (28%), followed by the Northeast (21%), South (18%), and West (16%). The rest are based in Canada (10%) and international markets (7%).

Revenue growth accelerated in Q3 among electrical distributors following three quarters of slowdown. Revenue increased by an average of 3.3%, compared with 2.3% growth in the quarter. However, growth did not match the 4% rate that participants in the previous survey had predicted for Q3.

Datacom respondents logged a second consecutive quarter of accelerating revenue growth, with an average increase of 5%, compared with a Q2 growth rate of 3.4%. Growth outstripped the prediction of Q2 panelists for a 4.2% gain in third-quarter revenues. Both datacom and electrical respondents topped the 2.4% average for revenue growth across all 20 industrial categories that Baird surveyed.

Despite the improvement over Q2 results, comments were decidedly mixed. Baird cited several panelists who noted a slowdown in September, calling the month's results "below average," "flattish," or "soft." But others said, "September was the best month in the last four" and "the last three to four months have really kicked into gear."

the ELECTRICAL DISTRIBUTOR • Jan. 20

Specifically with regard to construction, one panelist commented that there was "strong growth in commercial construction with slight margin decrease due to a competitive marketplace," while two others reported, "Commercial construction has slowed up a bit" and "signs of commercial construction slowing."

Several panelists said that their industrial OEM business was down or showing signs of stress or softness; two attributed the weakness to tariffs. In partial contrast, sales for MRO were described as "steady" or "closer to flat."

A number of firms said margins were holding up in spite of pricing pressure. At least three noted that tariffs "helped mitigate falling LED prices" or were "raising lighting prices and revenue." However, numerous

respondents reported that tariffs "remain an issue," are "a huge problem," and continue to "eat away" or "erode" margins. One added, "This administration is causing undue aggravation" because of tariffs and uncertainty over trade policy.

The outlook is relatively subdued for both types of firms regarding both Q4 2019 and the year ahead:

Electrical respondents expect Q4 revenues to increase by 2.8%, followed by identical growth in 2020. That would be a modest slippage from the 3.3% growth achieved in Q3.

Datacom respondents expect growth of 1.2%, which would be an improvement from Q3's .2% revenue decline. For 2020, datacom firms expect revenue to grow by 2.8%. the highest level in several years. The full set of sectors foresees rev-

enue growth of 1.9% in Q4 and 2.6% in 2020.

Multiple panelists cited the "terrible political environment" as a negative for the 2020 outlook. One respondent explained, "People hate division and they hate uncertainty; when they're uncertain they go to the sidelines," while another said, "I believe 2020 is going to be very rocky due to the political climate coming into an election year." In addition, several respondents said they expect a slowdown in construction, although one said, "Some of the contractors still have nice jobs on the books for next year." ■

Simonson *is chief economist for the* Associated General Contractors of America. He can be reached at solomon simonson@gmail.com.



SKIP THE SMALL TALK, GET YOUR **CUSTOMERS' ATTENTION!**

www.orbitelectric.com

Fire alarm contractors will love this

FA-UMAB



DIRECT-TO-STUD

Guided-slots on each side allow the box to easily adjust from 0 - 1-1/2" by loosening the screws

- The only ready to install mounting system for fire alarm, signaling, and oversized life safety devices
- 3-1/2" Box depth eliminates the need of box extensions
- SSB-TBAR's steel clips make it easier to install than traditional T-BAR Hangers.



Includes clips for between T-bar drop ceiling grids



SUSPENDED / DROP CEILING GRID Use SSB-TBAR to mount FA-UMAB in T-bar drop ceiling grids



Secure SSB-TBAR to grid using a Tek Screw



For use between wall studs & ceiling studs



BETWEEN WALL STUDS Use SSB to mount FA-UMAB



PATENT PENDING

GIVING BACK

NorthEast Electrical Supports the Pajama Program

Brockton, Massachusetts-based NorthEast Electrical, a Sonepar Company, donated nearly 175 pairs of new pajamas and more than 100 new books to the Pajama Program, a national 501(c)(3) nonprofit organization that promotes and supports a comforting bedtime routine for all children to help them thrive. Collected in all branches and at all events in October, NorthEast invited associates, customers, and vendor partners to donate items.

"This was our first community outreach project that included involvement from not only our associates, but also our customer and vendor partners throughout the region," explained Nate Pedro, NorthEast's community outreach program coordinator. "It was great to see the amount of positive feedback and support we received for such a heartwarming cause as the Pajama Program. I look forward to rolling out similar initiatives in the future."

Rexel "Scares Away Hunger"

Employees of Rexel USA took the month of October to "Scare Away

Hunger" and enjoyed making a difference in their local communities.

With branches participating across the United States, they collected more than three tons of food and \$2,000 in donations that went directly to the food pantries.

AWARDS & HONORS

SYD Once Again Named a Best Place to Work in PA

Harrisburg, Pennsylvania-based Schaedler Yesco has been named 13th in the Best Places to Work in PA, an annual award program designed to identify, recognize, and honor the best places of employment in the state.

This is the ninth year in a row and 13th time overall that SYD has won the esteemed award.

"It's a terrific honor to be recognized for the 13th time," President Farrah Mittel said. "Maintaining a culture of employee engagement and continuous improvement is critical to our continued growth. Making sure we build an environment that provides our employee–owners with the tools and work balance to do their jobs effectively is a key part of that."

"Work hard. Go home happy. That's our goal for our team," added Greg Schaedler, vice president.



With branches participating all across the United States, Rexel employees collected donations for more than 30 different food banks—and had a little fun along the way.



- > ETI Opens in Florida
 Las Vegas-based ATI Electrical Supply recently opened a new branch office in Florida.
 The location includes a 50,000-square-foot warehouse and will serve as the major hub for ATI's e-commerce business.
- > IMARK Expands Reach In November, IMARK Group became a member-owner of EDT GmbH, Essen, Germany.
- Infinite Sells to Kaelus Infinite Electronics has completed the sale of its Kaelus business to Microdata Telecom.
- Keystone Gets New HQ Keystone Technologies recently relocated to a new HQ and DC in a former Ford Motor Company building in the Philadelphia area.
- > LNCA Buys, Moves
 Legrand, North and Central
 America, has acquired Connectrac, a developer of flexible
 floor-based cable management
 solutions, and opened a new
 340,000-square-foot DC in
 Moreno Valley, Calif. The new
 facility replaces a Rancho
 Cucamonga, Calif., location.
- Signify to Buy Cooper Signify recently announced its intention to acquire Cooper Lighting Systems. The transaction is expected to take place early this year.

For up-to-date industry news and information, go to tEDmag.com.

AD's Electrical Business Recognizes 2019 Spirit of Independence Honorees

AD's Electrical Business Unit recently recognized the following 2019 AD Spirit of Independence honorees:

- U.S. Member Dollar Growth: Schaedler Yesco
- U.S. Member Percentage Growth: Frost Electric Supply
- Canadian Member Dollar Growth: Robertson Electric Wholesale
- Canadian Member Percentage Growth: Electrimat
- U.S. Supplier Dollar Growth: Siemens
- U.S. Supplier Percentage Growth: SATCO Products
- Canadian Supplier Dollar Growth: Acuity Brands
- Canadian Supplier Percentage Growth: Hammond Power Solutions
- Mexico Member Commitment: Multielectrico
- Mexico Supplier of the Year—Performance: Milwaukee Tool
- AD MVP: Prisinnia Longo, vice president, corporate purchasing, Turtle & Hughes
- Supplier of the Year— Marketing Excellence: Rittal Systems
- Best Conversion to an AD Supplier: VP Supply and Hubbell Lighting
- Network 804 Conversion Cup Winners: EECO, Electrozad, Gerrie Electric, Horizon Solutions, Kendall Electric, Stanion Wholesale Electric,

Turtle & Hughes, Van Meter Inc., Werner Electric WI

- Best Annual Planning Process: Main Electric Supply
- Giving Back: Van Meter Inc.
- Best Workplace Recognitions: Border States, Bricos, Schaedler Yesco, Van Meter Inc., Werner Electric Co. of MN

IMARK Electrical Announces Distinguished Performance Awards

IMARK Electrical recognized the following member companies for distinguished performance in 2018-2019:

- Supplier(s) of the Year: Klein Tools, Arlington Industries, Legrand /Pass & Seymour, Wiremold
- Excellence in Marketing Program Execution: NICOR, Broan-NuTone, Acuity Brands
- Excellence in Marketing and Communications: Intermatic, IDEAL Industries, Leviton Manufacturing
- Excellence in Service and Support: Greenlee, RAB Lighting, Acuity Brands, Appleton & O-Z/ Gedney
- Excellence in Service and Support: Encore Wire
- Excellence in Sales Leadership: ILSCO, NSi Industries, Southwire. ■

Got an event or news item to share in "tED"? Send it to mbyers@naed.org.





Plan with **CONFIDENCE**

The Market Data Program from NAED allows you to **Feed Your Strategy with Data**, and compare your results to that of the market.





www.tEDmag.com Jan. 20 • the **ELECTRICAL DISTRIBUTOR**

HE U.S. MARKET FOR ENERGY STORAGE SYStems (ESSs) is expected to grow tenfold between 2019 and 2024, with deployments-40% of them behind the meter (BTM)-exceeding 4.8GW a year by 2024. By this time, the market value will have reached \$5.1 billion, with front-of-the-meter (FTM) deployments accounting for 53% of the value. These forecasts came from Wood Mackenzie Power & Renewables, parent company to Greentech Media (GTM), and the Energy Storage Association (ESA), sources that Ken McCauley considers some of the most authoritative in the energy sector.

In January 2019, McCauley and Mark Crowdis joined Turtle & Hughes, based in Linden, N.J. Serving as executive vice presidents, they have established the company's

newest division: Turtle Energy Storage Services (TESS). The timing is brilliant: The annual value of the ESS market will more than double during TESS's first year, according

to GTM and ESA.

GTM and ESA have identified four primary market drivers for ESS: utility procurements, changing tariffs, grid service opportunities, and supportive policy structures. A Navigant Research report released in Q3 2019 cited additional market forces: "Utility involvement, along with cost declines, government incentives, and increased solar PV integration are the primary growth drivers responsible for increased DESS [distributed en-

ergy storage system] deployments."

Almost daily, business and consumer media recount myriad carrots and sticks motivating owners' deployment

of ESSs, including severe weather events, terrorist and cyberattack threats, resiliency advantages, and a boost to many companies' no- and lowcarbon-emission commitments. These factors too are driving the growth of the energy storage market.

While the number of ESS deployments is increasing, so too are the sizes of these systems and associated risks. In Products & Solutions, a September 2019 Na-

tional Fire Protection Association publication, the authors noted: "The proliferation of thousands of large energized boxes across the country-many hid-

den in places like office parks and apartment buildings—pose risks that have become a significant focus for the NFPA and other safety and research organiza-

BORO DATCH/ISTOCK

A CONTRACTOR'S THOUGHTS

California, by state legislation, has a mandate to generate 50% of its power needs via renewable resources by 2020 and 100% by 2045. Furthermore, all new residential homes must have a solar system effective 2020 in almost all jurisdictions.

INDUSTRY

NAED's Market Data Program

provides distributor members

with market share reports

by customer segment and

product category.

"It's a big push," said Emmitt Summers, vice president of sales at Solar Optimum in Glendale, Calif. "The state doesn't have incentives anymore for panels and federal incentives will start dropping effective 2020, but the good news is that the cost structure has come down because the industry has gotten so big and more efficient. We've become smarter, and we're selling and constructing at a much better value today than when we had incentives."

Incentives are still in place for batteries. With the Income Tax Credit and the state rebate, a solar system recovers its net investment in three to five years, and with a battery system, in another year or two.

Summers noted that most solar installations either sell to the grid or store energy for self-use and to sell. "For the residential sector, partial backup covers critical needs-refrigeration, medical equipment, air conditioning, Internet, etc.-typically with one battery, and full backup has two batteries that can store 13.3kWh per unit," he noted.

About three years ago California utilities began charging variable rates for electricity. "This was done to combat the solar competition, and it's increasing the demand for batteries," said Summers. "Nearly 40% of our customers in the past two years have purchased batteries with their systems."

Summers noted that battery manufacturers include Sonnen, LG Chem, and Enphase, but his company generally installs Tesla Power Walls because it is a fully integrated system. "The others require multiple parts," he said. "The power wall is the simplest way to provide a quality product to our customers." ■

Irwin Rapoport is a Montreal-based freelance writer. Reach him at rapoport.irwin@gmail.com.

tions. A centerpiece of these efforts has been the creation of NFPA 855, Installation of Stationary Energy Storage Systems."

According to GTM, the largest lithium-ion battery system installed to date-100MW/129MWh-was designed and delivered by Tesla to the Hornsdale Wind Farm in South Australia in November 2017. GTM described additional massive systems in development:

- The coastal town of Oxnard, Calif. (population: 200,000, 75% Latino), successfully resisted the development of a new NRG Energy gas plant on prime beachfront property, developing instead a 100MW/ 400MWh system of lithium-ion batteries, which is expected to come online December 2020.
- Florida Power & Light is building new solar installations, also replacing two aging gas plants in the Manatee area with a 409MW/900MWh battery storage system that is scheduled to come online in late 2021.

Universal Solution

McCauley rattled off a number of prime markets for ESS: "School districts, airports, utilities, waste treatment plants, community microgrids, industrial and commercial facilitiesany infrastructure that needs to operate without interruption, anything in California where they are intentionally turning off power to avoid fires."

He elaborated on a few of these opportunities: "The airport in Atlanta had a massive power outage in December 2017, believed to be caused by a fire in one of Georgia Power's underground electrical facilities. Some of the more major airports are looking at energy storage and owning their own power grids so they can island in the event of a power outage.

"In some school districts," he continued, "energy storage is required by utilities, and in some cases, the schools just want backup power. If

a school needs a new roof, they can wrap the cost of the roof into a solar and storage financing package and avoid current-year expense in its budget. We have a deal under contract right now with a food processor. Their equipment is sensitive to power fluctuations, and their operation needs a stable power supply."

TESS focuses on electrochemical (as opposed to mechanical or thermal) energy storage devices, i.e., batteries. "Lithium-ion batteries dominate the market today, accounting for 85% to 90% of market share," McCauley explained. "Saying 'lithium-ion' gets can wrap the cost of vou into the buildthe roof into a solar ing, but...the batand storage financing tery that's used package and avoid depends on the apcurrent-year expense plication and the

For example, some batteries are used for frequency regulation, where a

specific needs."

large burst of power is needed immediately and for a short period of time to maintain the U.S. grid operation at 60Hz, while backup power batteries support operations for four hours or longer when grid power is unreliable.

An energy storage system, especially when coupled with on-site solar generation, can resolve almost any energy-related challenge that a power consumer might encounter:

- Peak shaving. By pulling power from batteries when their energy demand is highest, firms can reduce or eliminate utilities' demand charges.
- Energy arbitrage. By charging batteries when utility rates are lowest (or capturing solar PV energy) and discharging when rates are highest, companies can lower or eliminate utilities' time-of-use (TOU) charges. On average, 60% of the energy consumed in a commercial enterprise today is attributable to TOU charges, accord-

ing to Stem, a company that provides artificial intelligence for ESSs.

- Operational stability. An ESS can ensure a stable power supply for uninterrupted operations in process, medical, and data environments.
- Capital investment avoidance. Distributed renewable energy generation and storage can obviate costly upgrades to existing power plants and transmission systems.
- New revenue. Storage systems with solar can create entirely new

If a school

roof, they

in its budget.

needs a new

-KEN McCAULEY.

Turtle & Hughes

revenue streams for some owners through wholesale markets, such as California's Demand Response Auction Mechanism.

TESS addresses all of these challenges through its technology agnostic, turnkev ESS solution, which includes design, planning, installation, technical engineering

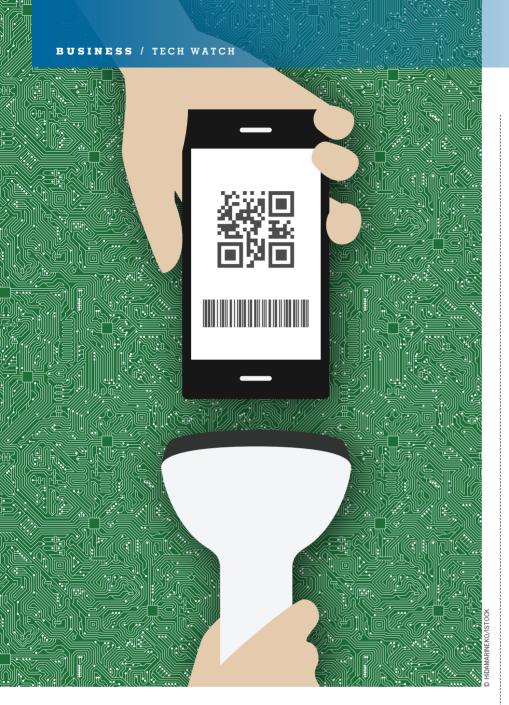
support, just-in-time delivery, and inventory solutions. According to McCauley, TESS's integrated solutions include products and services for system installation, stocking spare parts, administration of operations and maintenance, and "whatever the customers don't want to do for themselves."

As electrical distributors continue to expand the scope of their offerings to customers, taking on more

and more functions that previously were considered to be someone else's responsibility (e.g., preassembly, integrated supply), ESS may be the next frontier. ■ Niehaus, LEED GA, is an instructional

designer and writer and the president and founder of Communication by Design (communicationbydesign.net). Reach her at 314-644-4135 or Jan@Communication ByDesign.net.

www.tEDmag.com



MAKE IT MAKE MONEY

A new perspective can turn tech into a profit generator.

by Carolyn Heinze

ODAY, ORGANIZATIONS THAT CONTINUE TO TASK THEIR INTERNAL IT departments with simply "keeping the lights on" are criticized for their lack of vision. With the right culture, resources, and people in place, IT has the potential to move away from its traditional role as a cost center into something much more interesting: a revenue generator.

"Look at technology as the underpinning enabler for almost all business activities—nobody is really going to do anything without connecting to a service or system, either within the enterprise or online," said Peter Phillip, general manager at Sparkhound, an IT consulting and managed services firm. "If IT was

to remove all the things it does to stop being a cost center, [no other department] is going to be able to do what it does." For tax purposes and budget allocation it may be more beneficial to view IT as an expense, he said, "but mentally you should look at IT as that business enabler, because it is the underpinning systems that drive what the company does as a business."

Phillip noted that some organizations have optimized their IT departments to the point where they outsource them to other companies. "That's a growing trend, where [IT departments] became so efficient and so good at what they do that they're externally exposed and maybe you hire them to do your IT," he said, adding that this is the ultimate form of IT as a profit center and a smart way to recover the necessary investment in technology. But again, for these companies to be successful, they reject the viewpoint that IT simply exists to ensure that the phones are working, the Internet is accessible, and employees can log into their computers. "That view of IT is antiquated," Phillip noted.

In his own IT services firm, Bill McCharen, CEO at MyITpros, cited the example of a client: an insurance provider that offers cybersecurity insurance, including breach coverage. "This client is in the midst of starting a separate division or a separate brand where it has started offering this new suite of products to the market in general—and not just [to its] customers," he explained. "And it's because it was able to successfully package this solution and market it within its own customer base."

McCharen acknowledged that not all firms have the capacity—or the desire—to launch a completely new venture. However, he argued that companies need look no further than their own existing operations to identify potential for building a

the ELECTRICAL DISTRIBUTOR • Jan. 20 www.tEDmag.com

competitive advantage with technology. He suggested conducting a SWOT (strengths, weaknesses, opportunities, and threats) analysis to determine what areas of an organization could benefit from better technology-or better tech-related processes.

"[It's helpful to] just go through a process of evaluation and say, 'Let's think through all the different ways that we're leveraging technology' and then make assessments: Did we go with the cheapest? Is this yesterday's knowledge that we're leveraging for this specific process?" he advised. "I think they would determine that some

things are commoditized and some things are a true cost center; you just can't escape it. But I think that if any company were to really take that selfinventory and go through that process, it would find that there's an opportunity there to really change some of that expense into a competitive advantage in some way."

According to Erick Simpson, a consultant, speaker, and author focused on IT strategy and managed service provider business improvement, moving away from viewing IT as a cost center is something that he's been advocating for a very long time.

"It's the job of the CEO to position the IT function as enabling a profit center," he said, adding that he puts the onus on CIOs to contribute to this transformation. "It's the responsibility of the IT leader to promote this perspective. The best CIOs I have worked with have always understood the business case for IT and the intersection of business needs and technology needs. The more successful they are [at this], the more strategic value they have." ■

Heinze *is a freelance writer and editor.* Reach her at carolynheinze@free.fr.

BUSINESS / MILLENNIAL MINUTE

Lead or Leave?

Giving young employees leadership duties can help keep them on board.

■ULL EMPLOYMENT" IS an often-heard phrase these days. And, of course, it's obviously a positive development that most people are working. But as many business owners are discovering, full employment isn't always a good thing.

Sean Ellis is the program manager of automation and control at B & K Electric in City of Industry, Calif. Full employment has contributed, at least in part, to making it increasingly difficult to find qualified people to fill open positions, he said, while also making it harder to retain valued employees.

"There are plenty of folks who simply are not good fits

for those slots; therefore, it's turned into more of a poaching-type atmosphere, where the recruiting is very fierce," he explained. "[We have come to the point] where businesses have to leverage the resources that they have within their organization to the absolute max."

So what happens if one of those valued young employees receives an attractive offer elsewhere? What can a firm do proactively to prevent that employee from leaving?

When feasible, Ellis suggested that distributors consider getting Millennial employees more involved in the company leadership.



He's not suggesting promoting an employee to vice president after his or her first year; rather, knowing that their insights are valued can be a way for [them] to think less about the grass looking greener elsewhere and, by extension, investing more of themselves into the company.

Ellis cited a recent article in USA Today that referenced what it called "a multigenerational traffic jam" in the leadership in many companies. "That was their observation with regard to the lack of leadership [positions] that are opening up for the younger generations," Ellis said. "The leadership in our industry should definitely explore better ways to redistribute that decisionmαking power." ■

Joe Nowlan is a Bostonbased freelance writer/editor and author. Reach him at jcnowlan@msn.com.

A SIMPLE PROCESS

Getting set up to participate in the NAED Market Data Program isn't a "project" at all.

by Susan Bloom

T WISEWAY SUPPLY, A 47-YEAR-OLD FLORENCE, Kentucky-based distributorship with 125 employees and 10 locations throughout Ohio and Kentucky, President John Cain has always been troubled by statements that aren't based in fact. "One of my favorite sayings is by Mark Twain: 'It ain't what you don't

know that gets you into trouble, but what you know for sure that just ain't so," he said.

For that reason, Cain was among the many distributors excited to take part in the NAED Market Data Program, an initiative launched by NAED in partnership with leading market data analyst D+R International 18 months ago that promises to deliver participants a growing volume of distributorspecific data that will ultimately enable them to assess their market size, determine their market share by a range of categories, and track industry trends for the first time.

To ensure that all participants' data is properly disguised and must submit their sales receive their data in the proper format—an effort that has left some distributors hesitant to take part based on the perceived amount of time and resources involved.

"I was at the table when NAED decided to do this program and I remember one \$100 million distributor sharing that they 'didn't feel they had time for this project,"

> Cain recalled. "We participated to be good industry citizens and were surprised by how easy the setup process actually was. It honestly never took on 'project' status."



The Process Defined

At Mayer in Birmingham, Ala., "We weren't concerned about the time commitment because our ERP system gives us great flexibility in reporting and can produce data in multiple formats," said Barry Carden, executive vice president and chief digital officer. Mayer signed up with the NAED Market Data Program in 2018 and began providing data the following year.

"The process begins with a functional requirement meeting with IT specialists from NAED and D+R International," Carden explained. "Once you

www.tEDmag.com

able to be shared, at least five companies in each geographic area data to generate a report for that area. This requires distributors to invest time up front to submit and be able to

the ELECTRICAL DISTRIBUTOR • Jan. 20

have a clear understanding of the process and file specifications,

the development process can begin. In terms of the tools required, you'll need to be able to export data from your ERP system based on the specifications and provide the data in the format defined."

Carden noted that Mayer had one business analyst and one developer on the project, which required seven to 10 days for specification review and programming and four days of development time. "The team at NAED and D+R were easy to work with and always available to answer questions and help in any way," he added.

At Albuquerque, New Mexicobased Summit Electric, "We run SAP's ERP and Business Intelligence systems and we set up an automated script that pulls the data and creates a file," said Sheila Hernandez, vice president and chief information and technology officer. "It's pretty quick and easy for our marketing team to do this."

Cain, who admits that he was initially concerned with the time it might take to participate, was similarly surprised and delighted by the ease with which his firm was able to get set up in the program. "We don't have a fulltime IT person, so someone was going to get saddled with this job," he said of his immediate response. "But in total, it took us only 20 man-hours over a period of several weeks to get up and running through our Eclipse ERP system. Eclipse dictionaries had to be written along with reports to extract the data, but the D+R team did all of the heavy lifting and gave us the backbone of the process so that it wasn't so labor intensive. Our inventory control manager did the majority of the setup. Anyone with knowledge of Eclipse-or another ERP systemcan handle this."

For Carden, some of the most challenging parts of the process involved loading historical data. "That took the most time due to the volume of data," he said. "Depending on your company's data retention policies, you may

have to pull in archives to provide the requested time periods."

At Wiseway, "The most challenging part was that we had to ascribe NAICS codes to customers for the first time," Cain said. "It might be helpful for others if NAED could recommend how to apply those, but even that task wasn't very hard and was part of our total 20 hours of setup."

An Important Initiative

Cain acknowledged that misperceptions associated with getting set up have been a stumbling block for some distributors. "In a business where you have to make hay while the sun shines, distributors may believe that this process will require a major investment of time and take valuable

time away from day-to-day operations," he said. "But the D+R team took so much of the work off the table for us, and we were surprised at how easy it was."

Having been early adopters, Cain, Carden, Hernandez, and others now await the participation of enough distributors to allow the release of market share data in their regions.

"The major benefit of this program for distributors is the ability to have insight into your market share by product groups and how you're performing against your peers by market," Carden said. "It's important for our industry to provide this information to strengthen our market presence and ensure that we're stocking the right products, or else our customers will seek alternate sources.

"From a development perspective, this project was low impact on our resources and it's our hope that it will add to existing data we have on our customers and the markets they serve to identify gaps in our product group portfolio and increase our overall sales and market coverage," Carden added.

"Data is king and knowing beats guessing every time," Hernandez agreed. "Actual comparative data

> about how we're doing in a given market is very strong information. I believe that the more data points we can get, the better our resultant decisions/ actions will be. We plan to incorporate the NAED market data into our overall market analytics program. We hope distributors will continue to sign on, because without adequate participation, data can't be shared at a granular enough

-SHEILA HERNANDEZ, Summit Electric

Data is king

beats guess-

ing every time. Actual

doing in a given mar-

information. I believe

points we can get, the

better our resultant

decisions/actions

will be.

comparative data

about how we're

ket is very strong

that the more data

and knowing

level to make it valuable."

Cain concurred. "Data will be the currency we use when dealing with different parts of our business—from planning with manufacturers to strategizing with our own sales team and more," he said. "Data helps put meat on the bone and improves our road map; it helps make our sales, growth, and business development plans more targeted and accurate.

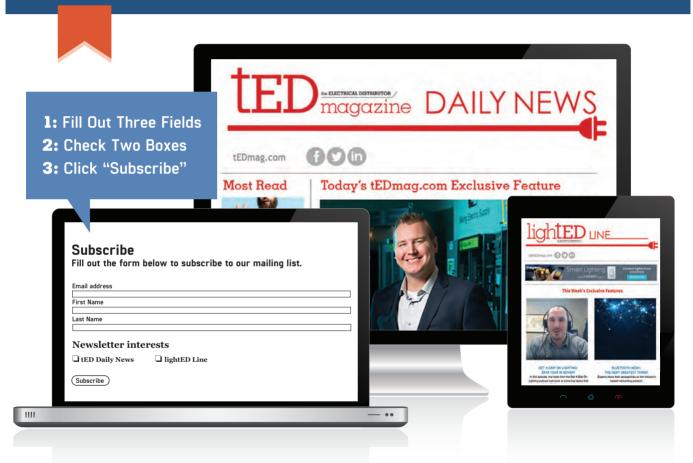
"I trust the Market Data team with the safekeeping of my data and look forward to reaping the rewards of our investment in the program. The process was easy—not nearly the 'project' I thought it was going to be—and hopefully stands to yield us many dividends," Cain concluded.

Bloom is a freelance writer/consultant who has spent 25 years covering the lighting and electrical products industry. Reach her at susan.bloom.chester@gmail.com.

SUBSCRIBE TO OUR

E-NEWSLETTERS

Here is what it takes to have *tED* magazine deliver news to you every day:



Thousands of NAED members have our award-winning* e-newsletters delivered to their inbox every day.

It takes seconds to sign up at www.tedmag.com/subscribe.

SIGN UP TODAY!

SELLING



/ SALES SPOTLIGHT

TECHNOLOGY & SALES

by Kara Bowlin

HERE'S NO DOUBT THAT TECHNOLOGY HAS changed buying habits in the past decade, and distributor salespeople have been forced to do their best to embrace technology and all the complications and benefits it may bring.

Bob Trolander is vice president of marketing and business development at Independent Electric Supply in Somerville, Mass. He's had a long career in distribution and has experience at both a large national distributor and a smaller independent company. He laughed as he recalled the technological evolution in his career.

"I think back of how it all started—when the fax machine came in and we had beepers. Then everyone migrated to cell phones and email," he said. "I think our next migration is to digital. And what that sales role is going to be in the digital world is going to evolve like it has from the other technology changes."

Trolander points to e-commerce as one of the major impacts technology will have on the modern salesperson. "We put a lot of effort into our e-commerce initiative," he said. "I see that as being a tool that sales reps can use to get more sticky with customers. For example, when you go to a big contractor, a sales rep might interact with 10 to 20 people. Some are old and some are young. The younger generation wants to interact with us digitally, as opposed to the

older people, who still want us to call on the phone or send emails."

Trolander explained that having the digital platform actually gives salespeople an additional opportunity to make sales and enhances a salesperson's offerings, especially for the customers who prefer to interact on a digital platform.

"Using e-commerce allows customers to place orders online or at least interact with us online by checking stock and availability, accessing old invoices, checking account balances, getting spec sheets, etc.," he said.

And while Trolander admitted that compensation structure is generally used

nents of an e-commerce platform, he ultimately believes that an online platform is an asset to any salesperson. "The customers who want an e-commerce capability will go to a distributor that offers one," he said, "so we should be out front making sure customers are doing it with us."

NAED's CEP-Sales lifetime certification program offers the opportunity to learn, grow, and revitalize sales numbers and careers.

Capturing Leads

as an incentive to convince salespeople to become propo-

Websites are crucial for not only e-commerce, but also capturing potential leads, said Paul Counts, co-founder of the marketing firm Marketing Counts. He explained that a distributor's website is a foundational tool for employing technology for sales benefit and recommends that every distributor make sure its websites are working to capture sales leads. "A lot of mom-and-pop shops might have something like a 'Contact Us' link to a

generic email, but you really want to focus on having a system in place like an opt-in form so you can follow up with potential customers in an automated fashion," he advised. "You can leverage technology to get those forms on your website."

While Counts recommends making sure a distributor's website educates potential customers on the company's brand and value, he also points to LinkedIn as the most powerful social media platform for increasing sales. "There are a lot of decision makers on LinkedIn, and LinkedIn

allows you to actually target people," he said. "You LinkedIn page and find a

has chosen Fruen's Sales

to rep in its northern mid-

Grissinger—Johnson Sales now reps Classic Wire & Cable in South Dakota and Wisconsin.

west market.

- Joseph E. Biben Sαles Corp. now covers Delaware, Maryland, New Jersey, Pennsylvania, north Virginia, and Washington D.C. for NICOR.
- The Mission Criticαl Management Group Was selected to rep Russelectric in Georgia.

can look at a company's list of people who work there and you can narrow that down by profession."

One Size Doesn't Fit All

Trolander noted that technology won't change each salesperson's role in the same way at the same time.

"You have to think about the markets that are served by an electrical distributor," he said. "For example, if you're working within the industrial market, maybe from a strategic or master accounts standpoint you



- Forman & Associates now reps Shat-R-Shield through Southern California and Electrical Marketing Solutions reps the company across Utah, Wyoming, southern Idaho, and northeast Nevada.
- Ronk Electrical Industries

the ELECTRICAL DISTRIBUTOR • Ign 20

might see a CRM tool being utilized a lot more to capture information people were dealing with in various locations. But when you're talking to distributors who are just calling on the construction market in a smaller geography, that program doesn't have enough value to make sense."

Trolander also emphasized that salespeople should remember that not all customers are the same—and therefore no one strategy will keep all customers happy. "I'll hear a salesperson say something like, 'I went over to ABC Electric and talked to Bill and he doesn't want anything to do with a new website,'" he explained. "I

say, 'Okay, but did you talk to anyone else?' Because another person may be doing all his business electronically. Or a third person may want to check pricing and availability but still call a salesperson and order over the phone. For the greatest success, you have to be able to interact with individuals in the way they want to interact."

And while Counts recommends using technology to its maximum potential, he understands that sales will likely remain relationship based. "You can leverage technologies along the way, but business is so much about relationships," he noted. "And that's never going to stop."

"Ultimately, the advancement of technology has been happening for a long time," Trolander said. "You need to embrace it, learn it, and then try to figure out how to use it to your advantage. You can't run away because it's coming at us."

Just as generations previously adapted from fax to email and from beepers to cell phones, the modern distributor must continue to ride the wave to wherever the next, best technology takes us. ■

Bowlin is a St. Louis-based freelance writer and publicist. She can be reached at karabowlin@gmail.com.

SELLING / ON THE BOOKSHELF

TRACTION

LEADERS IN THE ELEC-

trical distribution industry often face challenging issues: lack of control, people problems, hitting the ceiling, etc. In his book *Traction: Get a Grip on Your Business*, Gino Wickman shares his practical system for overcoming the most common hurdles that business leaders face.

In *Traction*, Wickman's goal is to help business owners understand and implement business systems so their organizations can sustain and grow on their own. Wickman calls his approach the Entrepreneurial Operating System (EOS), a process designed around time-tested, practical methods for business.

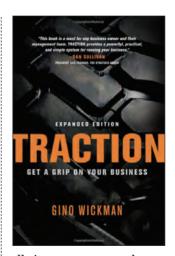
The book is organized in

three primary sections. The first two chapters introduce readers to the concept of EOS and the notion that a business needs to be run with only one operating system.

EOS is composed of several essential components and the next six chapters are dedicated to these key areas: vision, people, data, issues, process, and traction.

The final section of the book includes two chapters that focus on bringing the entire process together and includes tips on how to adopt EOS in an organization.

Traction presents a set of comprehensive processes and tools to help leaders of organizations of



all sizes to overcome key business challenges, gain control, and operate efficiently to move ahead as a healthy, effective, and cohesive team. Readers will learn the secrets to bolstering the six key components of the business and in the end discover simple yet powerful ways to lead the organization, resulting in better strategic decisions and ultimately more profitable growth.

As Wickman notes, "Successful organizations are applying EOS every day to achieve business results." Based on years of real-world implementation in thousands of companies, he provides a proven and practical method for achieving success.

Dan Nitowsky has 25-plus years of industry experience, with leadership positions in both the distribution and manufacturing sectors. He also served on the Board of Directors for NAED and the Electrical League of Ohio. Reach him at dnitowsky@hotmail.com.



BRING THE BEST TO THE MIDDLE

Use the power of the entire team to teach everyone the tactics of the top performers.

by Ken Wax

OME THINGS ARE JUST MORE DIFFICULT IN THE sales department. In the warehouse, for example, changing behavior is straightforward. If a manager notices a worker using the forklift incorrectly, he or she can simply stop the person and point out what to do differently. Immediately, the manager knows that the person is doing the task properly. If not, additional guidance can be given. It's easy and quick to see if the problem is fixed and in all likelihood won't reoccur.

But it doesn't work that way in sales. Suppose a sales manager observes a salesperson explaining something weakly or failing to ask a key question. The manager can't stop things to point out the mistake. There's a conversation going on; interrupting it is out of the question. It will have to wait.

But if the manager waits until later that afternoon or the

next day to pull that rep aside, additional problems arise. First, memories fade. The salesperson may remember things differently or, more likely, not remember the exact phrasing or moment the manager is talking about. At best, this makes it difficult to grasp and internalize the manager's advice. At worst, the salesperson feels he or she is being picked on, and morale can suffer.

Another problem is verifying. In the warehouse, that manager can simply keep watching for a few minutes and know for sure about the change of behavior. The sales manager can't. No one knows when a similar sales call situation will arise, and it's unlikely the manager will be observing at that moment. Unlike the warehouse manager, the sales manager can't quickly be confident that the problem has been solved.

There is a way to address this: Use the power of the

44 the ELECTRICAL DISTRIBUTOR • Jan. 20 www.tEDmag.com

entire group. Here's an example of how this can be done at the next sales team meeting:

The sales manager says: "As I walk around when you're all on sales calls, I overhear a lot of great things—strong ways to explain certain things, questions that overcome objections, and things like that. I can't, of course, stop each of you when I experience that since you're in a conversation with that prospect.

"Right now, there's no way for you, Lee, to know how, say, Chris handles certain objections or the questions Steve uses to discover opportunities. Likewise, Chris and Steve can't benefit from how Lee deals with competitive situations.

"Starting next meeting, and every week, I'm going to put aside 15 minutes for us to explore one particular area in our sales process. I'll pick the area, such as dealing with procrastinators or certain objections. Then we'll talk about it, discovering the different ways that team members use. We may do a bit of role-playing too."

Here's the beauty of this approach: It's the entire group. Instead of correcting one individual (and likely getting some friction or resentment), the focus is on "lifting all boats." The sales manager facilitates the discussion to elicit input from the top performers so "best ways" are identified. Then—and here's the key—the manager can say: "I'd like us all to use this (specific approach or tactic or phrasing) from now on. I think it's very strong and I want to hear about the impact when we meet next time."

What if the manager overhears salespeople still using their old, inferior approach? It's easy to remind them that you want them to use the way that was discussed back in the team meeting. It's just a reminder, so there's no bruised ego, no feeling of being unfairly singled out. The sales manager gets the desired change without confrontation or pushback.

Does this method always work? No.

As in any field, occasionally a salesperson is too lazy or arrogant to advance from his or her current ways. In these cases, this approach won't change the salesperson, but it will enlighten the manager about the true likelihood of succeeding, which is valuable.

The best way to develop a high-

performance team is to bring the best techniques to the middling performers. This group approach is a powerful tool any sales manager can use to reach that goal. ■

Wax helps teams sell more. Reach him at kenwax@gmail.com.





Applications now being accepted. www.naed.org/leadership

EMBRACE | EMBODY | EXEMPLIFY

www.tEDmag.com Jun. 20 • the ELECTRICAL DISTRIBUTOR 45

WINNING WAYS

A look into the challenges, key takeaways, and results of a 2019 Best of the Best winning entry.

by Carol Katarsky

IGHTFAIR 2019 WAS THE CONference's 30th anniversary, and LEDVANCE wanted to celebrate the milestone by highlighting its extensive, cutting-edge product lines and long association with the conference. "Lightfair is one

of our key events to engage with our distributor partners, and our focus for 2019 was to show how SYLVA-NIA LED lighting products are advancing light in renovation, making LEDVANCE the best retrofit partner for quality lighting products for any purpose, commercial and residential," said Wolfgang Mailaender, head of marketing for the United States and Canada (USC).

"This year, part of our booth focused on our extended SYLVANIA in-

door and outdoor luminaire portfolio, which includes many IoT-ready form factors designed to support distributors in being a resource for new controls-related applications," said Lawrence Lin, global CEO and managing director for the USC region.

LEDVANCE also showcased its "Who Lights Up Your World?" contest with the nonprofit "Be the Light" campaign. "People in the United States and Canada could nominate someone who is a source of light for those around them for a chance to be recognized and rewarded," explained Mailaender. "'Light Where You Need It'

doesn't just come from quality products; it also comes from those who spread light through positivity and simple acts of kindness. Members of the electrical industry do a lot of good for their communities, both professionally and personally, and we

want to honor those that make this world a brighter place."

Why It Worked

To maximize visibility at a

busy event, LEDANCE's team started planning well in advance and made some out-of-the-box choices. Starting the fall before the event, the team made site visits to host city Philadelphia to find an outstanding place for its customer event. "We had regular cross-functional meetings and brainstorming sessions to come up

with disruptive ways to help us stand out from the industry. We kept asking ourselves, 'What can we do differently?'" said Mailaender.

For the event, they ultimately selected a historic ship that could host ship tours, a cigar bar, and a musical performance by a "Be the Light" campaign ambassador, among other activities. "We picked it because it was so iconic to Philadelphia and created an atmosphere that was simply incredible," said Mailaender. "Guests were given a beautiful engraved compass in a wooden box to tie in with the event's nautical theme and communicate how

we want to help them steer toward the future. The whole evening was an incredible part of our overall Lightfair event and a great reflection of the brand and company."

That thinking continued to the tradeshow floor. To take advantage of its prime placement and provide a "wow factor," LEDVANCE hired a Philadelphia-based hip-hop dance group to perform its trademark high-energy routines. "It literally stopped people in their tracks," said Mailaender. "It also excited our booth staff and sent a message across the whole trade floor that LEDVANCE is the place to be."

Staff filmed the performance and quickly combined it with footage of excited LEDVANCE employees in the booth to create a video replay for the booth. "This was certainly new for us and a bit out of our comfort zone, but it paid off for both our employees and our partners," Mailaender continued. "Supporting a local organization that uses dance to encourage Philadelphia youth also tied in with our initiative about being the light for others. The dance group was such a hit that we decided to bring them back to perform at our customer event that same night!"

Both the booth and the customer event were a success. "Throughout Lightfair, our booth was very well attended, and it was great to meet with so many current and potential customers," said Mailaender. "Customers recognized our passion and commitment to their business. We maxed out on the attendance for our event months before Lightfair due to the customer response and had to keep adding resources to accommodate the high demand."

Another Winner's View

Fargo, North Dakota-headquartered Dakota Supply Group (DSG) also took home a win in the 2019 event category. Todd Eber, director of marketing, shared some of his thoughts



 IED

2019 WINNING ENTRIES

Event

Five companies took home an award in 2019 for a single event or series with a unified theme. Winning entries included customer training and appreciation events, special events, trade shows, and counter day promotions.



Dakota Supply Group



Electric Supply Center



McNaughton-McKay Electric



LEDVANCE



Van Meter Inc.

on how the use of events is evolving within the industry.

"At DSG, it's about being more intentional and prescriptive in our approach to customer-facing events than we ever have," he said. "That means determining what success looks like—for us and our customers and supplier partners—then determining ways we

can measure this to show we are impacting our business positively.

"Ultimately, we still believe that people want to do business with people they like working with," he continued. "We also are spending more time ensuring that what we're spending resources on is having a measurable effect on our business." In practice, that means increasing the use of webinars, pod-casts, video series, and app-based training modules that reduce the cost and time for delivering and receiving the information.

"For customer travel-related events, what's been most important historically still remains our goal: getting customers together with the right people from our business, along with the right people from our supplier partners' businesses," said Eber. "There's just no substitute for what creating a social bond or a friendship can do for opening up different avenues of partnering that otherwise may not have been available."

Eber noted that this also holds true for getting through those inevitable rough patches that occur when serving the general construction industry: "When a customer or supplier partner has gotten to know you at a core level from spending significant time together in a casual setting, you're able to work through issues

from a point of mutual benefit and respect, where perhaps that wouldn't have been the case if the relationship was built from solely a transactional perspective," he concluded.

Katarsky is a freelance business writer based in Philadelphia. She can be reached at ckatarsky@gmail.com.



UR tED ECONOMIC ROUNDTABLE PANEL THIS YEAR FEATURES KERMIT BAKER, chief economist for the American Institute of Architects (AIA) and the overseer of the Architectural Billings Index (ABI), one of the most important leading indicators for construction; Robert Dietz, chief economist and senior vice president for economics and housing policy for the National Association of Home Builders (NAHB); and Michael Sobolewski, U.S. engineering and construction leader for PwC.

None of our participants expects the current expansion to falter badly in 2020; however, markets are maturing, affordability issues are growing beyond the ability of rate reductions to offset them, and nobody can predict the zigs and zags of the trade disputes or their likely ramifications. Overall, our experts anticipate slower growth but not a downturn.

Looking forward to 2020, what key indicators do you think are the most meaningful and how are they performing?

BAKER: This year our ABI has been surprisingly weak after a strong January. In fact, allowing for some ups and downs, it has been pretty much flat since then. This is somewhat disappointing. That same trend is also reflected in the surprisingly flat construction spending numbers from the Census Bureau.

Other indicators I follow include new work into firms, which has also slowed. Backlogs are also a key indicator. They were very high in the first quarter—as high as they have been in this expansion. When backlogs dipped down to a lower level, we looked more deeply and found that half of firms in the country have work that has been stalled, delayed significantly, downscaled, or canceled. One dollar of business in every six had been deferred this way.

The broader economy is showing evidence of a slowdown, with GDP at a 1.5% to 2% rate. Employment is still growing, but more slowly. Business confidence readings are as low as they have been since the expansion began. Consumer confidence is holding up better but softening slightly.

DIETZ: I'll start with GDP. Real

GDP increased 1.9% in the third quarter of 2019. We are forecasting GDP growth of 2.3% this year and 2.1% in 2020. There is no evidence of imminent recession in the short term. We should see the economy continue to grow but at a slower pace.

Monthly job creation remains solid but on a slower trend, which will lead to a slight increase in the unemployment rate over the next two years. The NAHB is expecting job growth of 1.6% this year and 1.3% in 2020. If job creation remains flat or turns negative for several months, it is a warning sign for economy.

We are watching the 10-year Treasury rate, often used as a benchmark for mortgage rates. We expect this rate to trend higher, which will slow housing demand and economic growth.

SOBOLEWSKI: I watch M&A activity, and I would expect little in the way of "mega deals" and overall deal volume to decline (especially deal monies coming from outside the United States). As companies in the sector await an infrastructure bill and the possibility of a general market downturn, uncertainty looms large—and with that, companies are likely to pull back on everything from G&A spending to M&A activity to protect their balance sheet in the short term.

Do you see any trends or conditions right now that are either encouraging or discouraging for the 2020 economy as a whole?

DIETZ: The Fed's dovish stance on rates is a positive sign for the economy and housing market, as forecasts for slow growth continue to be a headwind for additional construction expansion, particularly after the housing affordability crunch of 2018.

The housing rebound that began in the spring continues, supported by low mortgage rates, solid job growth, and a reduction in new home inventory. Builder confidence (the NAHB/ Wells Fargo Housing Market Index [HMI]) reached a 20-month high in October. Although builders continue to remain cautious due to ongoing supply-side constraints and concerns about a slowing economy, we expect builder confidence and home sales will continue to rise into 2020. However, progress must be made on affordability challenges other than rates for housing to provide a lift to economic growth.

BAKER: After the tariff battle started, we saw higher prices in some key construction commodities—at the same time that a labor shortage was raising labor costs. The tariff effect on prices seems to have flat-

tened. However, there is worry that as long as trade issues hang unresolved, prices could go up again. This leads to caution, which is warranted. I don't see any evidence that people should be optimistic about the outcome.

SOBOLEWSKI: Trade is the issue. Continued trade tensions and underlying worries about a potential economic slowdown continue to weigh heavily on construction. These tensions are global (not just United States-China) and have been significant to the domestic construction industry across all sectors. These tensions, which appear to be escalating, are driving companies to shore up spending. This trend is likely to continue in the near term.

The Fed defied expectations and lowered rates three times in 2019, and mortgage rates are quite low. What expectations do you have for 2020?

DIETZ: We expect one additional Fed rate cut in the first half of 2020 as the employment gains have begun to slow. While lower mortgage rates have helped with affordability, home prices still outpace wage growth and homebuyers cannot benefit from lower rates without a down payment. This is a limiting factor for housing demand.

BAKER: That's a tough one because we were surprised by the long-term downtrend this year. What will the Fed do on the short end of the market? It is hard to see much movement; rates can't go much lower but are not likely going higher. In any case, the Fed will think long and hard about manipulating rates in 2020 in an election year and will probably try to have things in place by the end of 2019.

Should distributors be concerned about either deflation or inflation in 2020 and beyond? Why or why not?

DIETZ: Neither. Inflation is anchored to low rates just below the Fed's target. Price concerns should be

focused on the impact of costs from tariffs and trade conflicts. Tariffs and trade conflict not only raise the cost of specific goods, but also produce regional weakness in export-dependent regions, which in turn can affect local housing demand; this effect has been seen in many midwestern markets.

BAKER: There has not been much inflation in the economy recently, and with signs of overall slowing, it is unlikely that it will develop now. I don't think we'll head into deflation. I just don't see potential for negative rates or general deflation.

Do you have any expectations concerning the construction segments?

BAKER: Multifamily is still going strong, which is a bit puzzling. The West Coast and Northeast are overpriced, which affects growth. The Midwest is transitioning: Some markets are depressed, but they have been hit by the trade war—manufactured and agricultural goods—and a slowdown is moving in because of the weakening of the fundamentals.

The commercial sectors are slowing. Retail in particular is very weak. On the other hand, the institutional sector may have growth potential. Multifamily seems to be ready for a crash except that home ownership numbers keep declining. New York, especially Manhattan, seems overbuilt with multifamily.

In the institutional markets, health-care has the strongest outlook because of demographics. Schools do not have quite such a demographic push, but there is growth potential. Government offices, on the other hand, have moderating influences on demand. The Feds in particular have huge deficits, which will restrain demand. We are not seeing meaningful population growth, so the retrofit business is likely to outpace new construction. In fact, almost half of the work at architect firms is coming from retrofit and modification projects.

DIETZ: We expect continued modest gains for single-family construction moving forward, as areas beyond the exurbs respond to forsale housing demand and ongoing healthy labor markets.

Meanwhile, as apartment development levels off in 2019, we expect relatively flat conditions for multifamily starts. Remodeling should pick up after slowness in 2019 due to weakness in existing home sales, the labor shortage, and rising construction costs. But as existing sales increase somewhat with lower rates, remodeling should respond favorably.

Changes in the law have had significant impacts on the industry (e.g., the lighting rules in "EISA" and the administration's recent step-down from "EISA" enforcement). Are there any political trends or changes that might tend to be positive or negative for the industry?

DIETZ: We need to watch housing finance reform and what the future of Fannie, Freddie, the FHA, and the other sources of housing finance will look like postreform. We expect the process to occur slowly, but the future of housing demand depends on this debate. In particular, it is important that future policy keep a federal backstop for the secondary mortgage market, which in turns provides for the existence of the 30-year fixed-rate mortgage.

BAKER: The trade war is the No. 1 political issue today. Aside from that, I don't see construction in general being affected by the political realm. It is possible, of course, that interest in an infrastructure bill will revive if things slow.

That said, housing construction is becoming more of a political issue than usual. This is in part because of regional problems with affordability. The Pacific Coast has affordability issues; the Northeast has issues; even Riverside and San Bernardino (Calif.) have them. Furthermore, some areas have serious difficulty with construction. This result is that in the past decade we will have seen fewer than 10 million homes built—compared with, say, 15 million in the 1980s.

SOBOLEWSKI: Our policy at PwC is to avoid comment on political matters. However, without taking a position, I can observe that the optimism that an infrastructure bill would get passed has faded as the focus in Congress has shifted. This has added to worries in the industry as many were looking to such a bill to drive backlog during any expected general economic downturn.

Do you anticipate any impacts from trade conflict and uncertainty on home construction or the economy in 2020?

DIETZ: As we approach the election, I expect trade conflict to ease a little. But the ongoing impacts of the tariffs have had measurable impacts on the economy. I estimate that the trade war is reducing GDP growth by 30 basis points, and it is having regional housing market impacts. For example, the NAHB found that in counties with large sources of manufacturing employment, single-family home construction is down almost 4% over the past year. Similar experiences have been seen in areas where agricultural exports are a large part of the economy. These regional impacts are in addition to the direct cost effect of the trade war on residential construction material, which is adding more than \$1,000 per newly built singlefamily home. Of course, the lumber tariffs had a huge impact on lumber prices in 2018.

BAKER: As I noted before, trade conflicts not only have direct impacts on the costs of materials, but also cause caution in the markets.

For which sectors and regions do you predict a significant change up or down in

the coming year and beyond?

DIETZ: We at the NAHB are forecasting gains for townhouse construction, given the need for higher-density housing due to land constraints and growing demand for walkable neighborhoods. The size of single-family homes has declined over recent years; we expect the size will trend lower as builders add more entry-level homes into inventory and the custom market levels off. There will be volume growth for smaller single-family homes. We see less growth for multifamily condo construction due to the weak for-sale multifamily market and strength for rental demand. And we do believe that products that offer quantifiable savings in terms of labor/installation time will be attractive for builders and remodelers, given the ongoing skilled labor shortage.

We see gains in home sales activity in the South and West, as indicated by current readings of the regional NAHB/Wells Fargo HMI. We expect the South and West will remain the largest new construction markets and single-family construction will be concentrated in those regions, particularly areas in those regions with favorable affordability conditions, as reported by the NAHB/Wells Fargo HMI. Exurbs are a good example. We have seen some surprising strength in some small towns and rural markets in 2019 but expect a rebound in higher-priced inner suburbs in 2020.

Despite the positive conditions for housing, builders continue to face rising construction and development costs, which will continue to make housing affordability a major challenge and limit more robust growth in the housing market.

What are the big wild cards that you think exist for 2020?

DIETZ: The election is clearly a wild card in terms of the future of labor, environmental, tax, and finance policy. And the prospect for local govern-

ments to enable higher-density single-family construction will separate markets that can expand from markets that will stagnate. Many communities are examining zoning reform and other incentives to facilitate additional housing supply, given the ongoing lack of construction and the housing affordability crisis. In contrast, there has been an uptick on policies that will fail in terms of improving affordability, most notably rental control and increases of design and aesthetic requirements in some local markets.

SOBOLEWSKI: Outside of the possibility of an infrastructure bill, I think there are two "wild cards" heading into 2020. Interestingly enough, these are the same as 2019:

- 1. Cost containment. Many construction firms struggle with the issue of cost containment. Technology is changing the design, procurement, and construction of projects to make processes more efficient and less expensive.
- 2. Cybersecurity. When E&C organizations were asked in PwC's recent "Global Economic Crime Survey" to name the most disruptive threats they anticipate facing in the next two years, respondents listed cybercrime at the top. The numbers are quite alarming. Due to the increase in interconnected systems, cyber risk has grown, with many systems vulnerable, including manufacturing plants, distribution, construction, and corporate.

BAKER: The top of the list would be an international situation like an expanded trade war or an incident in the Mideast that interrupts global energy supply.

It is hard to tell what impeachment would mean for the economy. Political uncertainty wouldn't help, but it's hard to gauge the degree of the impact.

Sullivan helps distributors become more profitable. Reach him at 972-463-1125 or joe@joseph-sullivan.com.



THREE WAYS TO FIND MORE CANDIDATES

Increase hire rates by adding these employment resources to your recruiting repertoire.

by Jan Niehaus

HILE 58% OF RESPONdents to NAED's mid-2019 Talent Development Benchmarking
Survey use social media and recruiting websites—including
CareerBuilder, Glassdoor, Google for Jobs, Indeed, LinkedIn, Monster, Robert Half, ZipRecruiter, and at least a dozen more lesser-known sites—one could say that the hire rates achieved through these resources is weak.

Consider Elliott Electric Supply, based in Nacogdoches, Texas. Its hire rates through these sites are likely comparable to the rates achieved by other electrical distributors. Taylor Kulovitz, area operations manager, reported that during

www.tEDmag.com



with 80,000 square feet of warehouse space. We need good employees to support that growth."

REFUGEES AS A RESOURCE

Fortunately, in January 2019, Kulovitz waded into an extremely rewarding pool of prospective employees: resettled refugees, many of whom come to Elliott through Dallas-based Amplio Recruiting.

During the first nine months of 2019, Kulovitz hired 10 refugees from Amplio Recruiting into warehouse positions. In late September, 90% of them were still on board, "and the one who left had to leave because his family was moving out of the area," said Chris Chancey, founder and CEO of Amplio Recruiting.

Prior to resettlement, they worked as physicians, professors, and mechanics, and in other professional positions. "They are willing to take any job and work hard to improve their families' lives and contribute to the economy. Helping to integrate displaced people into American society is altruistic- and it makes good business sense: We have a whole population of people who need jobs, and our company and the industry need more dedicated employees," Kulovitz said.

This phenomenal retention rate is unheard of. "Right now, light industrial staffing agencies report an average 40% retention rate after three months," Chancey said. Compare this with Amplio's success in light industrial industries, such as warehouse, manufacturing, and construction: "80% retention after three months. 70% after a year," he said.

"Elliott's retention is even better than our company average," Chancey added. It is also better than the industry average reported by NAED in its 2019 Talent Development Benchmarking Report. Based on data gathered from 58 NAED members of varying sizes, the average annual retention rate for warehouse positions is 73%.

Under Amplio's model, employees remain on Amplio's payroll for the first three months of their placement in an employer company. "Ninety-nine percent of the people who complete three months go permanent at the end of that period," Chancey reported.

The first question posed to Amplio by prospective employers is predictable: "Are they legal to work here?" Yes, 100% of all refugees resettled in the United States are legal to work within days of their arrival. They are more rigorously vetted than any other individuals entering the country, according to Chancey. "Some have even served in the U.S. military. They are veterans, disciplined, and reliable," he said. He described resettled refugees as "the most underrated workforce" and "one of the best positioned to stimulate America's future economic growth." Since its founding five years ago, Amplio has placed more than 5,000 refugees in full-time positions in more than 300 companies across the United States.

"The two biggest hurdles—not barriers but hurdles, because hurdles can be overcome-are language and transportation," Chancey explained, although many refugees arrive already fluent in English. And, as Kulovitz explained, not all jobs require fluency in English: "In our warehouse, we pick with barcodes. The computer tells our order pickers where to go, how many of each item to pick, and where to stage the completed order. They just look for the numbers, and they are successful. Numeric systems are the same throughout the world. So there's little we have to teach to get them started. Great English isn't necessary in the beginning. They learn English quickly when it is spoken all around them."

To further accelerate language acquisition, Elliott and Amplio are entering a pilot program with a thirdparty online learning company. "Voxy

a 30-day period in late 2019, the company's recruiting coordinators reviewed 970 résumés, made 562 phone calls, conducted 169 phone interviews, and scheduled 123 inperson interviews. Only 15 of the 123 purported job seekers showed up for their scheduled interviews. Thirteen were offered jobs, and 11 accepted—resulting in an effective hire rate of slightly more than 1%.

Considering Elliott's current growth, a 1% hire rate is not good enough. "We're up more than 15% so far in 2019, and that's coming off a record year in 2018," Kulovitz said in early November. "We're adding three stores in Dallas this year, and our largest store is moving from a 50,000square-foot warehouse to a facility

SPECIAL REPORT/

is an online ESL [English as a second language] software program that is vocation based. It's not 'The dog ran through the park.' The language is related directly to the industries they are working in, a lot of it blue collar. We have seen a huge increase in the speed with which refugees gain fluency," Chancey reported.

With offices in Atlanta, Dallas-Fort Worth, Raleigh-Durham (N.C.), Houston, and Detroit and plans to establish 25 locations by 2025, Amplio is currently discussing contracts with other electrical distributors.

THOSE WHO SERVE

Like Elliott, St. Louis-based Graybar has drawn prime employees from an often overlooked labor pool: veterans, in Graybar's case.

"We make it a priority to contact veterans' organizations. Our culture is one that embraces and values those who have served in the military, and we extend that welcoming environment in our recruiting practices. We actively participate in career fairs with veterans' organizations, such as Hiring Our Heroes and RecruitMilitary. Additionally, our recruiters post open jobs on local veterans and military job boards and advertise these opportunities in the communities that we serve," explained Beverly Propst, senior vice president, HR.

Graybar's retention rate for this select group of employees is impressive: "The veterans in Graybar's current workforce have average tenure that is more than a year longer than the rest of our employees," Propst explained. "Of all the veterans currently in Graybar's workforce, more than half are in management and leadership positions. They tend to be natural team builders and experts at navigating and assessing new situations and relationships."

So consistent and persistent are

Graybar's efforts in veteran communities that the company earned a Flag of Freedom Award from Show-Me Heroes, a program administered by the Missouri Division of Workforce Development to recognize Missouri companies that demonstrate an eagerness to hire veterans. "Last year, we hired well over 50% of the applicants who self-identified as veterans," Propst said. The percentage could have been higher since, as Propst explained, "Many choose not to self-identify as veterans."

Graybar's commitment to honoring members of the military started as long ago as World War II, when the company assured employees who were actively serving in the military that jobs awaited them upon their return. This commitment to veterans continues today and extends well past the moment of hiring. "We publicly acknowledge veterans' service at large company events. And, of course, we recognize the men and women who have served by reaching out to them personally on Veterans Day. Many of our locations across the country recognize veterans in unique ways,' Propst said.

Some branches host events—e.g., the Operation Restoring Veteran Hope Retreat in Phoenix; a golf fundraiser for Folds of Honor in Albany, N.Y.; and in St. Louis, a Veterans Day 5K Walk/Run, collections for Operation Gratitude, and a public television program—"Spotlight on Those Who Served"—that features a different St. Louis-area veteran every week. "And as part of our 150th anniversary this year, Graybar saluted the military on several instances at graybar150.com," Propst added.

Both Graybar and Elliott attended veteran career events during November: Elliott at "Red, White & You" and "Hire Heroes USA" in Dallas and Graybar at "Hiring Our Heroes" in multiple cities. "At least 10% of the workforce in our distribution center are veterans. I look for vets because



they have been well trained, have a great work ethic, and learn quickly. We have hosted appreciation lunches for our veterans." Kulovitz said.

8 ID INTERN INTEREST

Veterans and refugees rarely bring distribution industry experience, except for veterans who worked in logistics. There is one group of employment candidates, however, that arrive already familiar with distribution dynamics: interns in Industrial Distribution (ID) programs at university business and engineering schools across the nation.

One such ID program boasts abiding ties specifically to electrical distribution: the Charles & Patsy Collat Industrial Distribution Program in the Collat School of Business at the University of Alabama at Birmingham (UAB).

"Our program differs from other ID programs in that it was born of the electrical industry," explained Kristen Craig, Collat ID program manager. "Charles Collat, who is the chair emeritus at Birmingham-based Mayer Electric Supply, created our program in the late 1980s. We were designed to serve many technical industries, including HVAC, plumbing, power fluids, and materials, but the electrical industry is our hallmark.

"After Mayer, our next largest part-



ner is CED," she continued. "Throughout our history, we have also received significant support from Gravbar, Gexpro, WESCO, Rexel, and Grainger,

students, with enrollment growing every year. Completion of an internship is a graduation requirement. "ID students usually work an internship for more than one term, usually for a year or even two years. A very high percentage of them become full-time employees," Craig said. The demand for ID interns is so high, she said, "that I often have more companies looking for students than I have students available."

Asked why more distributors don't take advantage of ID internships, Craig suggested, "There are generational ideas about Millennials and Gen Z-that they have unrealistic expectations and job-hop. We hold onto these beliefs in error. The ID students here are intelligent, hardworking, very dedicated, and aspiring

reported, "This was the first time that ID was listed among the top fields for college students to pursue. We are on the cusp of changing from 'What is industrial distribution?' to a position of high visibility and attention. More individuals are seeing industrial distribution as an exciting career path."

Evidence of this is apparent in UAB's ID enrollment rates, as Craig explained: "A lot of students start out in engineering or on other business tracks and change their majors to industrial distribution after a year or so. Our enrollment is growing across the board, from freshman to senior levels, but the most dramatic growth is in the freshman classes. Freshman enrollment in ID has grown more than 50% over the past five years.

"The demand for ID interns is so high that I often have more companies looking for students than I have students available."

-Kristen Craig, Collat ID program manager, Mayer Electric

as well as a great number of small, family-owned distribution companies. The list goes on and on, with manufacturers too. When Charles Collat founded the program, he included a great number of his suppliers. Many electrical manufacturers are highly valued partners."

The support from partner companies takes the form of permanent hires, internships, and scholarships. Host companies also participate in career fairs, as guest speakers in classrooms, and at "house parties" in the department's new building. "Many companies spend a whole day on campus recruiting. Companies also invite faculty and students to industry trade shows and events, including NAED meetings," Craig said.

Current enrollment in the Collat ID program stands at approximately 250

but with very reasonable expectations. These students grew up post-9/11. They have seen volatility. Some of their parents lost their jobs, lost their retirement plans. What these students want is long-term employment, a chance to make a difference, and an opportunity to work hard and work their way up in a company."

Elliott has had no reservations about hiring Millennials or Gen Z. "We hire Texas A&M Industrial Distribution grads every year and have two internship classes each year. Our ID hires are already familiar with the business and enthusiastic. We place them in our Leadership Development program on a sales or management track," Kulovitz said.

Industrial distribution was recently listed by Forbes as one of the top 25 majors for college graduates. Craig

Every year, we've seen increases in the number of incoming freshmen.

"We hear from all industries under the ID umbrella about the challenges of succession planning and finding and hiring qualified applicants," Craig continued. "I'm always somewhat surprised by this because ID is growing as an academic major at so many institutions." Add to UAB's and other universities' ID programs recruiting resources such as Amplio Recruiting, RecruitMilitary, and Hire Heroes USA, and the pool of eager, qualified employment candidates is definitely expanding.

Niehaus, LEED GA, is an instructional designer and writer and the president and founder of Communication by Design (communicationbydesign.net). Reach her at Jan@CommunicationByDesign.net.

AUTOMATION INNOVATION

Few solutions have seen more change-or more potential for innovation—than automation and control products.

by Kara Bowlin

ECHNOLOGY IMPROVEMENTS have impacted virtually every market segment, from industrial oil and gas facilities and commercial retail spaces to hospitals and schools. And as these products continue to evolve and provide more value to end-users, distributor salespeople are faced with a vast array of products and solutions to offer to their customersunder different brands, offering different bells and whistles, and at varying price points.

Nae Bell-Taylor is the control products marketing specialist at Siemens Smart Infrastructure USA (siemens. com), which provides products and solutions that control, monitor, and protect motors and other loads in industrial and commercial applications. These products, most of which are under the SIRIUS brand name, are typically modular and compact for easy plug-and-play integration to support advanced electrification, automation, and digitalization of capital assets like machinery.

"As an example, our core motor control offering includes NEMA and IEC contactors, overload relays, open and enclosed starters, and solid-state soft starters," Bell-Taylor said. She noted that Siemens's most innovative products include a motor management system that can provide the operator with detailed operating, servicing, and diagnostics data for failsafe disconnection of motors.

"[These products] can be enabled with communication via PROFIBUS, PROFINET/PROFIsafe, Modbus RTU, and EtherNet/IP and OPC US,

which also lets you take advantage of the cloud. We have a new 3RW5 soft starter that prevents pump blockages, helps users avoid water hammer, and gives detail and fault monitoring data back to the operator."

Bell-Taylor also pointed out that endusers can choose from a variety of input devices for controllers, such as pushbuttons, limit switches, and function relays. "These devices can be retrofitted to communicate, providing operators with predictive and real-time information. We also offer RFID technology with our SIRIUS ACT key switches to help se-

cure machines and give the latest information on who was the last user to use the device."

Bell-Taylor explained that the main customer base for these products includes "end-users in industrial and commercial applications—anywhere there is a motor, pump, or fan."

Connectivity Is Key

Andrea Temporiti is digital lead for ABB's Electrification Business (abb. com). She believes that digitalization, intelligence-based analytics, and machine learning capabilities are changing the way we collect, control, and utilize data.

"Our focus is on streamlining that IT-OT convergence inflection point," she explained. "Our recent announcement to deploy AI to help commercial and industrial buildings revolutionize their energy management and tackle rising electricity peak tariffs is a good example.

"Additionally, automation platforms like SCADA [supervisory control and data acquisition] and DCS [distributed control systems] are used across many different industries," she continued.

Temporiti also noted that connectivity is a major feature for new products. "Automation regimes now access a much broader set of capabilities via

the cloud than they used to on the local system," she said. "AI, machine learning, and increasingly specialized analytic tools enable a new level of real-time operational control. The data generated in the field is also being collected and applied to predictive and condition-based maintenance programs. These are all interrelated, but it starts with connec-

tivity: You have to acquire the data before you do anything with it. "Our products are connected to a digital platform that is continually evolving, but let's look at energy management and predictions as an example," she continued. "First, we analyze energy data by aggregating it or comparing energy generated with energy consumed or requesting from the grid. Then we can highlight peaks of energy consumption and send alerts in real time. Thanks to these new machine learning features, we are able to create a prediction of the consumption and generation of the energy in the building. This means that we can create a typical consumption profile based on the collected data, tailored

for each building. The higher the his-

The higher the historical data collected and the granularity, the better the algorithm is performing. We've seen cases where we've saved customers about \$80,000 in one year

-ANDREA TEMPORITI, **ABB's Electrification Business**

just by monitoring.

torical data collected and the granularity, the better the algorithm is performing. We've seen cases where we've saved customers about \$80,000 in one year just by monitoring."

Customer Benefits

Temporiti ultimately sees three main pain points that automation and control products can solve: comfort and safety via automated lighting, temperature controls, and additional safety features; sustainability via energy efficiency, resource efficiency, safety, and uptime; and reliability.

For Bell-Taylor, the biggest benefits to customers who adopt automation and control technology are a higher ROI and reduction of their total cost of ownership through asset management, condition monitoring, asset performance management, predictive maintenance, optimized predictive maintenance, optimized resource maintenance, and energy usage and cost savings.

Both experts agree that more customers likely will be integrating new automation and control products and solutions to their facilities over the next decade—and beyond. That trend necessitates that distributor salespeople work closely with manufacturers to ensure they are up to date with the newest offerings.

"Distributors...are trained just like a Siemens employee so they are educated on how products work and their benefits," explained Bell-Taylor.

"We work with distributors to explain how we provide value through

A CONTRACTOR'S VIEW

For nearly 50 years, New Electric, a Spark Power company, has been installing electrical systems in the United States and Canada for a variety of industrial applications. According to Myles Howe, regional manager of automation and controls, today's control and automation components perform multiple functions and connect with several systems.

"It is more than simply moving pieces of machinery, cylinders, motors, and valves," he said. "End-users are using cameras and specialized parts to verify that certain processes have happened. Some systems are fairly straightforward, but you also have operations where many things are happening and the customer wants to record data."

"The three major brands can all accomplish the same things but in different ways," noted Theodor Prodanovic, a senior automation tech, who added that "cheaper brands" can be cost effective and very reliable for simpler systems.

Improvements have led to PLCs being smaller and having quicker processing speeds. "Programming tools are more intuitive," said Howe. "PLCs were fairly simple many years ago, and now you can make more decisions and do more measurements. There's a lot of processing, data collection, and trending. Networking has also improved, as most products use Ethernet-based communications. I used to carry a bag full of adapters and cables and now I can get online with any PLC with an Ethernet cable and the right software."

He added that most manufacturers offer diagnostic systems that warn when components are under stress and approaching failure. Backwards capability is also important for many clients.

"Manufacturers are looking to move forward, but some customers still have older hardware and don't always want to update it," said Howe. "Sometimes the latest software is not always backwards compatible. It would be great if manufacturers could provide tools for these situations. Moreover, if they could standardize the format of programming for software, that would be helpful too.

"Sensors, motors, and valves experience a lot of wear and tear in the field," he added, noting that individual parts can easily be replaced. "Europe seems to drive a lot of improvements with this; a lot of sensors, valves, and components have I/O Link protocol built into them, so if I plug in a new part, all the configurations are uploaded immediately."

Howe stated that prices are stable and in line with cost-of-living increases and the latest offerings do more compared with older models. He is also pleased with the service his distributors provide but would appreciate them providing a software support tool for product configurations.

"You have to apply inputs or outputs to processors and other field devices, and it would be nice to have a drag-and-drop software so that configuring these interfaces could have internal checks and balances," he said, adding that web pages with pricing and detailed online specs for

Irwin Rapoport is a Montreal-based writer. He can be reached at rapoport.irwin@gmail.com.

comparisons and availability also would be beneficial.



© PHONLAMAI PHOTO/ISTOCK

our smart and connected products," Temporiti added. "Distributors are really on the front lines of the digitalization and energy revolution of our customers; it's important for them to

understand our capabilities there." ■

Bowlin is a St. Louis-based freelance writer and publicist. She can be reached at karabowlin@gmail.com.



Circadian-friendly lighting strategies may be beneficial for residents of senior facilities. The Lighting Research Center's 24-hour lighting scheme demonstration room provides cycled electric lighting with cool, high light levels during the day and warm, low levels in the evening.

LIGHTING FOR SENIOR FACILITIES

Seniors deserve the best quality of life that good design has to offer, ensuring an environment that supports their needs.

by Craig DiLouie

in the United States, with about 1 million living in more than 30,000 assisted-living communities, according to the National Center for Assisted Living. Moving forward, according to the Population Reference Bureau, the 65-plus segment of the population is expected to double to nearly 100 million by 2060, increasing its total population share to 24%. This will very likely result in increased demand for senior facilities in the future.

These facilities range from retirement housing and assisted-living facilities to nursing homes and hospice, with the average age being 83 to 86. They can be challenging for lighting design, as the visual system undergoes physiological changes with age that can reduce visual acuity and color discrimination while heightening sensitivity to glare.

As a result, a higher percentage of elderly people have

vision impairment compared with the rest of the population. Vision in dim lighting, reading small print, distinguishing colors, and transitioning between bright and dim spaces can all be problematic. Eye diseases such as glaucoma and cataracts become more common. Disruption of circadian rhythms may occur, due to either degradation of sight or possibly Alzheimer's disease or dementia.

Lighting design for these facilities typically emphasizes daylight and higher electric light levels, minimizing glare through indirect light distribution and other means, good uniformity of light distribution, and accent lighting for safety. Transition spaces receive high illumination for visual adaptation. Flicker should be avoided. As people live in these facilities, the lighting should promote circadian entrainment, and the lighting equipment should be pleasant and promote a sense of home.

the ELECTRICAL DISTRIBUTOR • Jan. 20 www.tEDmag.com

C CABLE FITTINGS

ONE TRADE SIZE... FITS SEVERAL CABLE SIZES



Arlington® 800.233.4717 • www.aifittings.com

Save time and money! Arlington's low-cost MC cable fittings, for dry locations only, are super-convenient and cost-effective. They come with end stop bushings that vary the size of the opening – ONE trade size fits several cable sizes!

Changing end stop bushings is fast and easy no need to remove the strap. Insert the bushing that works the best with the cables you're installing. (Built-in end stop in fitting)

Catalog Number	Trade Size	Cable Min	O.D. Max	Wire Bui Min	ndle O.D. Max	Conductor size # of Conductors* (AWG/KCMIL)
8412	1"	.780	1.120	.660	1.000	6/3, 6/4, 4-3, 4-4, 2-3, 2-4, 1-3
8413	1-1/4"	1.000	1.460	.870	1.370	2-3, 2-4, 1-3, 1-4, 1/0-3, 1/0-4, 2/0-3, 2/0-4, 3/0-3
8414	1-1/2"	1.360	1.770	1.250	1.590	2/0-4, 3/0-3, 3/0-4, 4/0-3, 4/0-4, 250-3, 250-4
8415	2"	1.700	2.200	1.550	2.050	250-4, 300-4, 350-3, 350-4, 500-3
8416	2-1/2"	2.100	2.700	1.950	2.400	500-3, 500-4, 600-3, 600-4, 750-3
8417	3"	2.500	3.300	2.350	3.000	600-4, 750-3, 750-4

^{*} Examples of 3- and 4-conductor cables accommodated.

RAIN-TIGHT • CONCRETE-TIGHT FITTINGS FOR

Made in USA



CKETED MC CABL

ONE FITTING FITS MULTIPLE JACKETED MC CABLE SIZES



800.233.4717 • www.aifittings.com

Arlington[®]

Save time and money with Arlington's rain-tight, concrete-tight fittings for jacketed MC cable.

ONE fitting FITS MULTIPLE cable sizes!

LTMC50 ships ready to use on #10, #12 or #14 jacketed MC cable. Try the NEW SIZES too...LTMC507 and LTMC75.

Because they fit more than one cable size, these fittings reduce inventory, saving you the cost of stocking several different fittings.

Ideal for Parking Decks. **High-rise Residential**

Catalog Number	Cable Ranges (Armor Diame	
LTMC50	.415"565"	
LTMC507	.550"730"	goes into 1/2" KO
LTMC75	.725"890"	goes into 3/4" KO

2015, REV2019 Arlington Industries,

The basic lighting design principles for senior facilities presented here are based on two documents: the Facility Guidelines Institute's

(FGI's) 2018 FGI Guidelines for Design and Construction of Residential Health, Care, and Support Facilities and the Illuminating En-

gineering Society's (IES's) ANSI/IES RP-28-16, Lighting and the Visual Environment for Seniors and the Low Vision Population.

TUNABLE-WHITE LIGHTING AT ACC CARE

In 2015, the Sacramento Municipal Utility District (SMUD) evaluated a trial installation of tunable-white LED lighting at the ACC Care Center, a senior living facility. SMUD and ACC collaborated to learn more about how tunable-white lighting impacts sleep, nighttime safety, and behavior, following quidelines published by the Lighting Resource Center.

At specification time, few tunable-white luminaires were suited to replace the existing fluorescent system. Several luminaires were installed in a corridor, two resident rooms, a nurse's station, a family common area, and an administrator's office. Light levels improved in the resident rooms due to the LED lighting, while the spectral output of the lighting in these rooms plus the adjacent corridor and nurse's station changed throughout the day to support circadian entrainment.

According to the DOE, which published the project as a GATEWAY study, the ACC staff captured health-related benefits that may be attributable to the new lighting, including fewer agitated behaviors in three studied patients, with a reduction in use of medications for one of them. Further, the number of patient falls in the corridor was reduced. -C.D.







Tunable-white LED lighting in the ACC Care Center corridor, from top: morning setting (6500K, 66% output), afternoon setting (4000K, 66% output), and night setting (2700K, 20% output).

Lighting for Living

Designers should plan the lighting based on the site conditions, building orientation (for daylight), and needs of the care population. The greater the need for care, the more impact the physical environment can have on quality of life and overall safety. Therefore, the lighting should be verified to be responsive to residents' daylighting and electric lighting needs.

The design of senior care facilities is not regulated at the national level, with states making the rules. A majority of states have regulations based on the FGI guidelines. For lighting, these guidelines cover various design aspects, while referencing IES RP-28 for minimum recommended light levels, which are typically higher than for other types of applications. Otherwise, the Americans with Disabilities Act prohibits wall objects such as sconces projecting more than 4" into circulation zones when mounted 27" to 80" above the finished floor.

The FGI guidelines require daylighting in common areas such as dining rooms, while recommending it wherever else possible based on its value for light levels, color quality, and circadian entrainment. The guidelines

add that if daylight is not available, the electric lighting should promote circadian response, which may be accomplished with intensity and color control in LED luminaires.

Daylight can be balanced with light shelves, skylights, etc. To control brightness and minimize glare, daylight apertures should be properly shaded and lamps and luminaires should be properly shielded or concealed to minimize glare, while producing lighting patterns free of glare, shadows, and scalloping. This may involve shielded direct lighting or indirect lighting. Daylight, general and task electric lighting, and surface reflectances should combine to produce the desired maintained light levels based on IES recommendations.

A key consideration for senior living is visual adaptation. This is the

ability of the eye to adapt from one light level to another so as to maintain the same level of visual acuity. For many elderly people, adaptation between extreme contrasts-such as leaving bright sunshine to enter a dim building-can reduce visual acuity and may even be disorienting. As a result, entry/transition spaces such as lobbies and vestibules require higher light levels to assist with adaptation. If residents will enter a space with a very low light level, seating may be provided to give them time to adjust. Similarly, windows at the end of corridors should be properly shaded.

In living spaces, residents should be given easily accessible task lighting. Low-level night lighting should be provided that is mounted no higher than 2´ above the finished floor. In case the night lighting may be disturbing, it

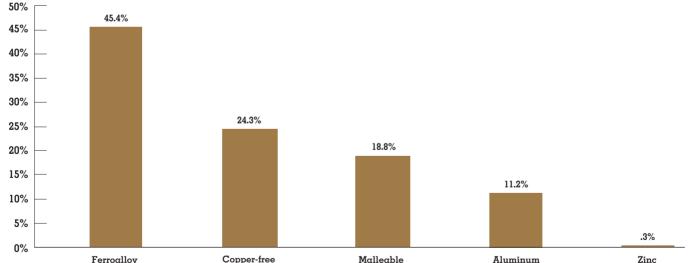
may be portable or able to be switched. Corridor general lighting should also be reduced at night using controls.

Regarding color, the IES recommends a minimum light source CRI rating of 80 for interior spaces at senior facilities—preferably higher in specific spaces where color accuracy, discrimination, and appearance are important, such as hobby areas and dining rooms. The IES also recommends a slightly higher correlated CCT. A high CRI and slightly higher CCT (e.g., 3000K instead of 2700K) can help mitigate loss of color discrimination that can occur with age.

DiLouie, LC, principal of Zing Communications (zinginc.com), is a lighting industry journalist, analyst, marketing consultant, and author. Reach him at cdilouie@zinginc.com.

EXPLOSION-PROOF CONTROL STATIONS BY MATERIAL

12-MONTH DOLLAR SHARE ENDING SEPTEMBER 2019



EXPLOSION-PROOF CONTROL STATIONS—SHARE CHANGE BY MATERIAL 12-MONTH DOLLAR SHARE ENDING SEPTEMBER 2019 VS. ONE YEAR AGO

iron

aluminum

Ferroalloy	3.3
Copper-free aluminum	1.7
Malleαble iron	2.7
Aluminum	1.3
Zinc	2

Epicor's Industry Data Analytics tracking information is based on sales from a representative sample of full-line electrical distributors located throughout the United States. For more information, call 512-278-5800, email epicorindustryanalytics@epicor.com, or visit www.epicor.com/en-us/business-need/sales-and-marketing/vista-information-services/.

Distributor Doings



Marty Burbridge

Crescent Electric Supply, East Dubuque, Ill., announced the retirement of president and CEO Marty Burbridge, effective April 1. He began his sales career with Crescent in 1978, held various

leadership roles since 1985, and was named president and CEO in 2008. A successor for the position is expected to be announced early this year.



Mike Herrmann

Mike Herrmann, CFO of Horizon Solutions, Rochester, N.Y., announced his retirement. He has been with the company since 1982 in various roles including CFO of RERO Distribution, which

later merged with two other distributors to form Horizon.

Lawson Products, Chicago, appointed **Brian Hoekstra** as vice president of mergers and acquisitions (M&A). He formerly served as manager, M&A, with Clark Retail Enterprises and has held financial planning roles at AT&T and the Dial Corporation. He most recently served as senior director, M&A, at W.W. Grainger.

Parrish-Hare, Irving, Texas, named Ron Brown to the role of conceptual engineer. He brings with him more than 40 years of industry experience.

Meanwhile, **Randy Maxey** has retired after 45 years in the industry. He began his career as the CFO for Cummings Electrical Supply in 1974 and has been CFO of Parrish-Hare since 2004.

Manufacturer Moves
Dave Merker has been named president of *CANTEX* following Don

Wirtanen's passing in July. He was hired in 1991 as director of sales and marketing—electrical; in 2001, he was promoted to vice president of sales and marketing.

Eaton promoted **Brian Brickhouse** to president of the Electrical Sector, Americas Region. He has three decades of industry-specific experience, most recently serving as president of Eaton's Electrical Systems and Services Group. Prior to that, he was the president of Eaton's Electrical Sector—Asia Pacific Region.

Eaton also named **Scott Hearn** to the role of president of the global Crouse-Hinds and B-Line organization. He most recently served as president of Eaton's Crouse-Hinds division. Prior to that, he held the position of president of Eaton's Notification businesses.

Keystone Technologies hired **Tony Collins** as OEM sales manager. He brings with him more than 20 years of industry experience from companies including Appleton, Universal Lighting, and Hatch Lighting.

Kris-Tech Wire promoted Kevin Watkins as sales team leader. He began his electrical career as an electrical contractor at Brendan Stanton, later became the commodity manager at Billows Electric, and then joined Kris-Tech as northeast sales manager.

Erin Nichols joined *LSI Industries* as national accounts sales manager. She brings with her account management and business development experience in the medical and pharmaceutical industries.

Nora Lighting announced the appointment of six new staff members:

New staffers and their departments include: Michael Chiu, inventory; Sandra Ibarra, assistance manager, customer service; Kenny Le, customer service representative;

Brandon Nguyen, electrical engineer; Jose Reyes, production supervisor; and Canan Williams, product engineer. Nguyen was recently promoted from intern to full-time staff.

Rittal appointed John Finnegan as a senior sales director. He began his professional career with the company in 1997 as an account manager, moving up to his prior role as director of sales for the Southeast Region.

Rittal also named **Mike Smetana** as a senior sales director. He joined the company in 2016 as sales director of the North Region and most recently served as director for the U.S. channel. Prior to joining Rittal, he held sales management positions at both BURNDY and Klein Tools.

SATCO welcomed **Edgard Pedrazas** as director of contract and pricing. He brings with him more than ten years of experience in the lighting industry, including holding multiple positions at LEDVANCE.

Charles (Chuck) Oldaker Jr. has been elevated to the position of executive vice president at *Service Wire*. He has also served in public accounting as an auditor and as a business taxation accountant.

Also at Service Wire, **Steven Stanford** was named national sales manager—industrial. He brings with him more than 30 years of experience in various sales and management roles in the wire and cable industry.

Universal Lighting Technologies named Christian DuFour as regional sales manager for the North Central region. He brings with him more than two decades of industry experience in a variety of roles, from distributor project manager to manufacturer territory sales manager. ■



Send *your people news items to mbyers@naed.org.*

To request free information on the products and/or services offered by tED advertisers, visit the URLs below.

ADVERTISER	WEBSITE	PAGE
Acuity Brands Lighting	holophane.com	23
Arlington Industries	aifittings.com	3, 11, 59
Bridgeport Fittings	bptfittings.com	IFC
IDEA	idea4industry.com/faqs	7
Keystone Technologies	keystonetech.com/samples; keystonetech.com	1, BC
Killark Division of Hubbell	universalreloaded.com	15
Light Efficient Design	led-llc.com	9
Milbank	milbankworks.com	31
NAED/EPEC	naed.org/epec	IBC
NAED/Leadership Development	naed.org/leadership	45
NAED/Market Data Program	naed.org/market-data	32
Orbit Industries	orbitelectric.com	29
SATCO Lighting	satco.com	5
SLG Lighting	slgus.com/ted	25
tED magazine/Best of the Best	tEDmag.com/best	12
tED magazine/Newsletters	tEDmag.com/subscribe	40

tED (ISSN 1067-3806) is published monthly by the National Association of Electrical Distributors, Inc., for the information of its members and those manufacturers interested in selling through the electrical distributor. Publication office: 1181 Corporate Lake Drive, St. Louis, M0 63132. Phone (314) 991-9000. Printing office: Fry Communications, 800 West Church Road, Mechanicsburg, PA 17319. Printed in the U.S.A. Periodical postage paid at St. Louis, M0, and additional offices. Postmaster send address changes to tED, 1181 Corporate Lake Drive, St. Louis, M0 63132. Subscriptions: \$40.00/yr. for nonqualified electrical distributors and individuals affiliated with manufacturers in the field of publication. Rates for all others and foreign subscriptions upon request.

www.tEDmag.com Jan. 20 • the **ELECTRICAL DISTRIBUTOR** 63

"The true measure of success is how much better you make those around you."

-ERIC DISSELER, district manager, Kansas City metropolitan area, Crescent Electric Supply

ric has been in industrial distri- bution for 13 years, with the last six in electrical distribution. His leadership career began with successfully opening and managing a new branch for Fastenal Company without any residual business when he was 22 years old.

How would you define your leadership style? Lead by example. I never ask any of my employees to do something that I wouldn't do.

What are some of the most significant or memorable lessons you have learned about leadership during the course of your career? Leadership is not about oneself, and it's important to stay forwardthinking while running a business.

What is your favorite part about leading others? What is your least favorite? My favorite part is helping others succeed and become more confident in their role. My least favorite part is knowing that my success lies primarily within the hands of others. This is a common challenge many new leaders struggle with, but one that all good leaders must work through to be the best leader they can be.

What is your next career goal and when do you hope to reach it? To be central region vice president within the next 10 years.







AFTER 75 YEARS IN THE LIGHTING BUSINESS
WE BELIEVE YOU'RE NEVER TOO OLD TO...









SET A
HIGHER
STANDARD

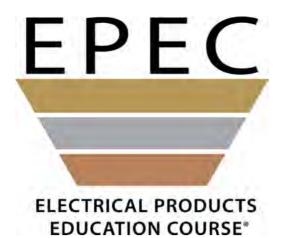
R E D E F I N E EXCELLENCE



INNOVATE

WORK HARD AND PLAY EVEN HARDER

LED LAMPS | FIXTURES | DRIVERS | LED RETROFIT KITS | BALLASTS



BE THE EXPERT THEY NEED



EPEC is the cornerstone of sales and product training in the electrical distribution industry for more than 30 years.

Learn how you can become the technical expert your customers need.

