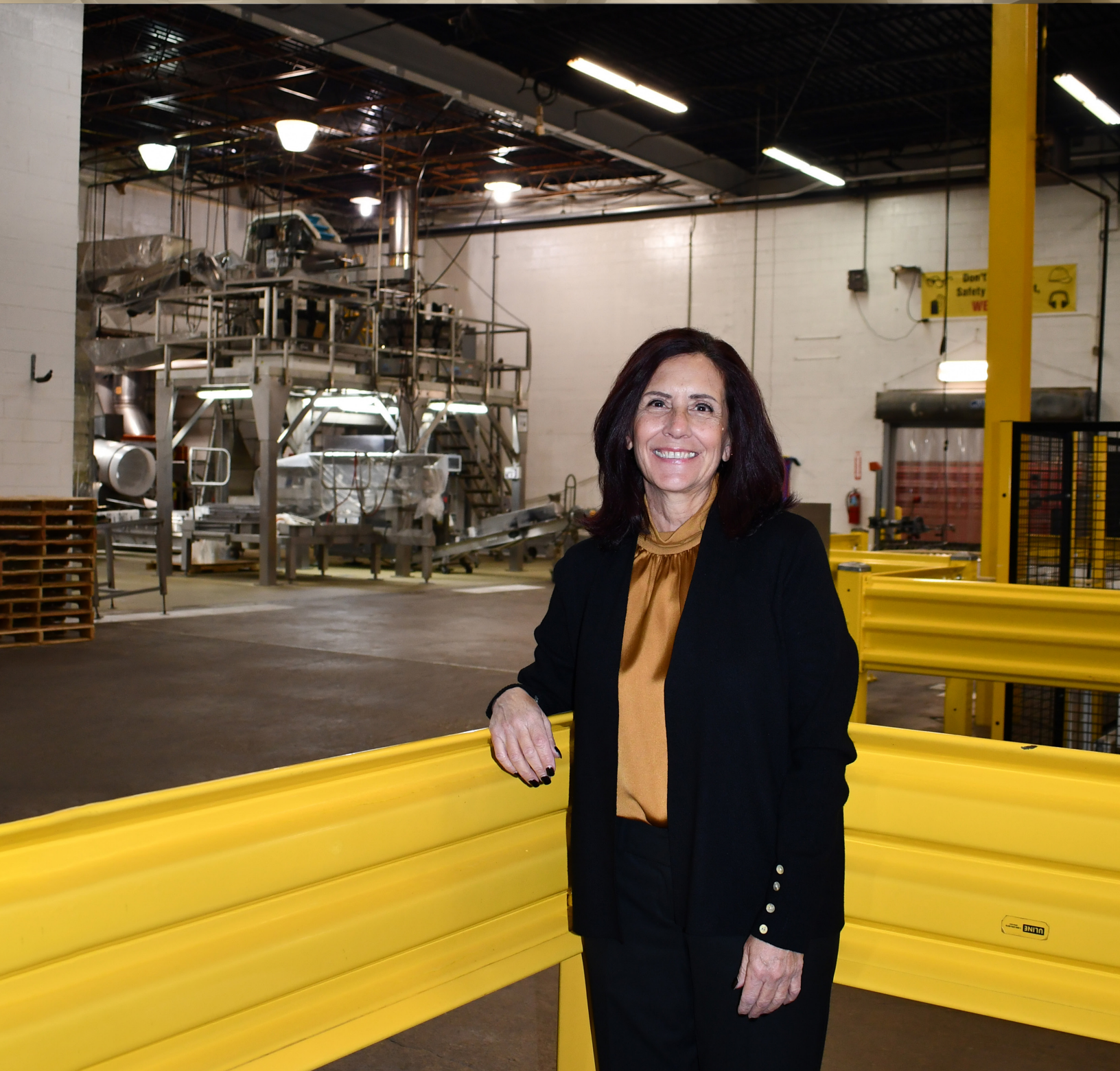


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**ILLINOIS
MANUFACTURERS'
ASSOCIATION**

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MISSION STATEMENT

The Illinois Manufacturers' Association is the only statewide association dedicated to boldly moving Illinois' makers forward. The IMA is the oldest and largest state manufacturing trade association in the United States, representing nearly 4,000 companies and facilities.

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For address changes and adjustments, write to *The Illinois Manufacturer*. Presort standard postage paid at Bloomington, IL. Postmaster: Send address changes to *The Illinois Manufacturer*, 220 East Adams Street, Springfield, IL 62701. Telephone: (217) 522-1240.

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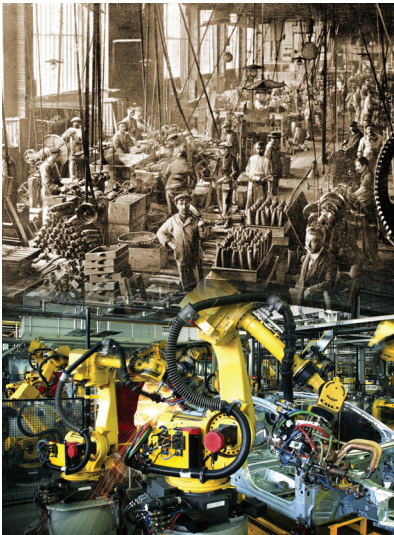
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MANUFACTURING PAST, PRESENT & FUTURE

MARK DENZLER, PRESIDENT & CEO



One hundred and thirty years ago, during the height of the Industrial Revolution, a small but ambitious group of manufacturers met at the Medinah Temple in Chicago with a goal of influencing laws and regulations passed by the General Assembly. These seven companies founded the Illinois Manufacturers' Association which is the nation's oldest – and one of the largest – state manufacturing trade associations and the strongest business advocacy organization in Illinois. Their vision and foresight were prescient for today's IMA.



At the time in the late 1800s, Chicago was an epicenter of activity hosting the Chicago World's Columbian Exposition which showcased a host of new manufactured products including the zipper, Ferris Wheel, diet carbonated drinks, Cracker Jack, automated dishwasher, Aunt Jemima pancake mix, and Wrigley's Juicy Fruit Gum. A Milwaukee company, founded in 1844, entered its product "Pabst Select" into a contest and after winning, renamed their brew "Pabst Blue Ribbon."

Many of you may have read Erik Larson's book (and now movie), *Devil in the White City* that detailed Dr. H.H. Holmes, America's first modern serial killer operating in the shadow of the World Fair while famed architect Daniel Burnham acted as director of works at the Exposition. Burnham, famous for his quote, "Make no little plans. They have no magic to stir men's blood," later authored the 1909 Plan of Chicago that preserved the open lakefront that exists today. By the way, the Museum of Science & Industry is one of only two remaining buildings from the 1893 Fair, and the White City moniker derived from the white stucco building erected to host thousands of visitors. Golf enthusiasts may know that Chicago Golf Club, located in Wheaton, was built at the end of the train line to accommodate Europeans visiting the World Fair who wanted to golf. It is the oldest 18-hole course in North America and one of five founding members of the U.S. Golf Association.

Starting in 1893, manufacturers approached the World Fair with a slightly different approach than previous Fairs in London, Paris, and Philadelphia. Rather than simply showcasing their products, manufacturers showed the public how these products are made with process exhibits. Much of the shift can be attributed to views of manufacturing at the time as some people had been displaced from farms as a result of industrialization. These on-site exhibits helped instill confidence and left consumers with working knowledge of manufacturing.

I've recently thought a lot about what manufacturing workplaces looked like at the turn of the 19th century (and the future) after spending ten days on the road with Dave Boulay from IMEC during our Makers on the Move bus tour to celebrate Manufacturing Month. He talked about arkwrights, millwrights, blockmakers, and blacksmiths and today's jobs that include mechatronics, industrial engineers, CNC operators, and quality control analysts. As Dave said often on the tour, manufacturing is in our genes because our great grandparents, grandparents, and parents were all makers!

Today, 130 years later, the IMA is **BOLDLY MOVING MAKERS FORWARD** with special emphasis on education and workforce development. As the only business group with a full-time, dedicated executive focused exclusively on workforce, we are committed to helping address workforce challenges. Throwing in the advent of Artificial Intelligence, Internet of Things, augmented and virtual reality, and machine leaders means that manufacturers are truly moving at the speed of light.

We have stood side-by-side with manufacturers for 130 years, and it's been fun looking back at old photos and records from IMA history. Our Annual Luncheon was wonderful with record turnout to help honor CSL Behring as the 2023 Barry L. MacLean Manufacturer of the Year and recognize our members celebrating milestone anniversaries. The IMA is stronger than it has ever been and well positioned for the next 130 years. As we move forward, invite your colleagues, suppliers, and customers to join the IMA because we are all stronger together. ♦

Thank you,



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CORPORATE ENVIRONMENTAL PERFORMANCE: AUDITING PERFORMANCE HIDING WITHIN THE BOTTOM LINE

SCS ENGINEERS

Environmental management systems and natural resource management can become a routine part of facility operations when the commitment is from the highest level of an organization, and specific goals and objectives are established and routinely monitored for progress. Over the past several years, environmental and resource management strategies have transitioned from typical liability and cost management into business opportunities. This approach has developed from policies based on Extended Producer Responsibility (EPR), Environmental Social Governance (ESG), Corporate Social Responsibility (CSR), and pressure from clients and customers. Managing these policies well and turning them into everyday practice across the organization can lead to a resilient, more profitable business where people want to work.

Achieving the objectives of EPR, ESG, CSR, and increasing performance metrics required by clients and customers requires accounting and verification of the underlying metrics. These metrics are established by way of a Corporate Environmental Performance (CEP) audit. Implementing the findings from a thorough CEP audit can become the basis of a more resilient organization.

A CEP audit serves to assess the extent to which a company effectively manages its impact on the environment in the course of its operations, the manufacture of its products, and the services it provides for clients and customers. The assessment focuses on finding areas that minimize negative environmental effects while promoting sustainable resource use. Mapping out the goals of a CEP can serve to focus on the areas that best serve the particular business. Small businesses have a different set of priorities than large publicly traded entities, and a CEP audit should be scoped accordingly. Regardless of the size or type of the organization, the goal is to design the audit to maximize outcomes. The following list does not apply to every CEP, but a CEP for a publicly traded company may include an audit with the following elements:

- **Environmental Compliance:** Adherence to local, state, and federal environ-

mental laws and regulations. Ensuring compliance helps prevent legal issues and regulatory fines.

- **Resource Efficiency:** An assessment of the use of natural resources such as water, energy, and raw materials. Companies that prioritize resource efficiency often experience cost savings and reduced environmental impact. In some instances, improvements to measuring devices may be required.

- **Waste Management:** Implementation of strategies to eliminate both regulated and non-regulated waste generation, and when a waste cannot be eliminated, reduce, reuse, and recycle waste generated by the operations. Effective waste management minimizes environmental pollution and conserves resources. A “waste sort” can verify the efficacy of waste management programs.

- **Emissions Reduction:** Efforts to minimize air emissions, including greenhouse gases, and criteria and toxic air pollutants. An assessment of economically and technically feasible technologies designed to reduce the overall environmental footprint from these types of emissions not only benefits the environment, they may also result in less burdensome recordkeeping, reporting, and monitoring required by environmental agencies.

- **Renewable Energy Adoption:** Integration of renewable energy sources into the company’s energy portfolio which can include the use of solar, wind, geothermal, and other renewable sources, or alternative energy power purchase agreements to power operations.

- **Product Life Cycle Assessment:** Evaluation of the environmental impact of a product or service throughout its entire life cycle, from raw material sources to manufacturing, use, distribution, and disposal.

- **Supply Chain Sustainability:** Consideration of the environmental impact of the entire supply chain. This involves working with suppliers to review their sustainable and responsible practices.

- **Biodiversity Conservation:** Employ efforts to protect and conserve biodiversity in areas affected by the company’s operations. This may involve initiatives to pre-

serve natural habitats and support local ecosystems.

- **Environmental Management Systems (EMS):** Implementation of systematic approaches, such as ISO 14001 certification, to manage environmental responsibilities, improve performance, and demonstrate commitment to environmental stewardship.

- **Stakeholder Engagement:** Collaboration and communication with stakeholders, including local communities, clients and customers, environmental organizations, and environmental justice groups to understand concerns and incorporate their perspectives into environmental management strategies.

- **Innovation for Sustainability:** Integration of sustainable practices and innovation into product development, processes, and business models to reduce environmental impact, such as design-for-disassembly, circular economic practices, and Industry 4.0 technologies.

- **Reporting and Transparency:** Regular public disclosure of environmental performance through sustainability reports and other communication channels. Transparent reporting allows stakeholders to assess a company’s commitment to environmental responsibility.

- **Corporate Social Responsibility (CSR):** Integration of environmental considerations into broader CSR initiatives. Companies may engage in community outreach, environmental education, and philanthropy to further enhance their environmental performance.

- **Continuous Improvement:** A commitment to ongoing assessment and improvement of environmental performance based on changing circumstances, technological advancements, and evolving sustainability goals.

Corporate Environmental Performance is a crucial aspect of overall EPR, ESG, CSR, and sustainability efforts. Companies that prioritize and effectively manage their environmental impact contribute to a more sustainable and resilient business environment. Positive environmental performance is increasingly important for attracting environmentally conscious consumers, investors, and employees. ♦

TECHNOLOGY IMPROVES QUALITY AND ENHANCES WORKFORCE RESILIENCY

EMC INSURANCE

Bridging the automation gap, collaborative robots are used in tandem with workers to enable manufacturers to automate processes, reduce material handling, and reduce human risks and errors. Companies that use cobots are ultimately more efficient and adapt to market changes more quickly.

The use of cobots can also help build a stronger, more resilient workforce. Collaborative robots are made to work alongside human employees and take on the most repetitive or dangerous tasks, as well as those that require extreme precision. The key to a productive collaboration with workers is to assign cobots tasks that fall under the four Ds: those that are dangerous, dull, dirty, or dear. Here are some of the ways cobots can have a positive impact on employees in the workplace:

Workforce Resilience:

Employing cobots enhances worker safety by reducing physical strain and injury risk, which in turn also reduces work-related absenteeism.

Skill Enhancement:

Working with cobots encourages employee skill development. With a cobot covering simple repetitive tasks, the worker can focus on more specialized skills. Additionally, learning to program, operate, and maintain the machines are also valuable skills that increase employee versatility and value in the job market.

Reduced Human Error:

By assisting in tasks prone to human error, such as those requiring precision and consistency, cobots help reduce or eliminate mistakes and minimize rework or defects. Their accuracy reduces errors, resulting in products that meet or exceed quality standards, enhancing the reputation of the manufacturer.

Consistency and Efficiency:

By continuously performing tasks without fatigue (a leading contributor to workplace injury) cobots provide more efficient output. This consistency contributes to increased production due to the reduced need for downtime. It also leads to more stable output quality, while reducing the need for rework, waste, and additional worker product touches.

Overall, cobots support workforce resilience by improving safety, fostering skill development, and contributing to higher-quality manufacturing processes through their consistent and precise operations.◆



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G&W ELECTRIC CO. CASE STUDY: WORKFORCE SUSTAINABILITY THROUGH NEURODIVERSITY

STANNUM CORE SOLUTIONS

With workforce challenges taking place across industries, neurodiverse strategy has been a point of interest for companies looking for creative solutions to attract and retain talent. One such company, G&W Electric Co., has committed to creating competitive, integrated employment outcomes for neurodivergent workers. This approach has reduced time and skill waste, leveraged the unique skills of these employees, and enhanced their culture to one of true inclusion.

About G&W Electric Co.

Headquartered in Bolingbrook, IL, G&W Electric Co. has been creating sustainable power solutions for over a century. Founded by engineers of Commonwealth Edison, Harry Gear and Paul Williams, G&W Electric has been a long-time industry leader in innovation and safety.

From the original manual and automatic switchgears to the creation of the Viper® recloser and Trident® solid dielectric recloser, and a state-of-the-art microgrid, G&W Electric continues to engineer the next evolution of power solutions for the needs of the future.

In addition to being in the vanguard of sustainable energy, G&W Electric is a workforce diversification trendsetter through its expanding culture of neurodiversity. To date, G&W Electric has completed six rounds of hiring for their neurodiverse workforce initiative. They currently employ nine individuals across five different departments. These efforts have created a foundational change for G&W Electric and are a vibrant aspect of the company's identity.

Achieving Efficiency through Neurodiversity

Launching a successful neurodiverse workforce strategy began with a keen analysis to identify jobs where neurodivergence was an asset. Generally, these jobs were repetitive in nature, had consistent and measurable expectations for productivity, clear chains of communication, and required little independent decision-making skills.

After identifying the most qualified positions for neurodiversity, it was time to prepare the environment and pre-existing

personnel. Creating this environment of success required Spectrum Certified™ job descriptions, detailed schedules, standard work enhanced with visuals, and other custom supports. Simultaneously, key stakeholders were trained on best practices for working with neurodivergent talent. Finally, prospective neurodivergent employees were guided through a robust skill-matching process to ensure that the right candidates were placed into the right positions.

The results garnered the attention of David Jones, Production Manager for G&W Electric Co. When asked how a neurodiverse workforce has impacted his production team, he said, "In our case, their ability to excel in repetitive tasks has led to increased production... Our neurodivergent employees' strong attention to detail and consistency have led to more efficient workflows. Their handling of lugs has resulted in reduced errors and better quality-control, leading to fewer disruptions and less waste." Not only did these neurodivergent workers meet the expectations laid out for all employees, but, in many cases, they, in fact, exceeded the pre-set standards.

Jones later went on to describe how the social behaviors of his neurodivergent workers have also led to an enhanced workplace. "We decided to have some neurodivergent employees lead the team during pre-shift stretches to highlight their leadership potential. Neurodiverse individuals can excel in different roles by leveraging their ability to focus on specific tasks and lead by example. By embracing neurodiversity, we have created a work environment that values and respects individuals for their diverse abilities. This inclusivity fosters a sense of belonging and motivation, increasing job satisfaction and higher employee morale." This inclusive approach created universal results. Creating space for these neurodivergent employees to take on leadership roles helps establish trust amongst all employees and highlights G&W Electric's deep commitment to belonging.

In closing, Jones remarked on the lasting benefits of integrating a neurodiverse workforce. "Integrating neurodiversity into our department has improved productivity, enhanced processes, and [provided] a more inclusive and innovative work en-

vironment. Our success story serves as an example of how embracing neurodiversity can yield substantial benefits for both employees and the organization as a whole."

A winning culture and lean process are critical for success in any organization, but we all know that the real gold comes in the metrics:

Microswitch Assembly:

- 30% increase in growth (150 switches →210 switches)
- 75% decrease in required man hours (32 hours / week →8 hours/week)

Aerial Lug Assembly:

- 30% increase in growth (300 lugs →420 lugs)
- 62.5% decrease in required man hours (32 hours / week →12 hours/week)

Embracing a neurodiverse workforce enabled a modern-day business alchemy for G&W Electric – trading waste for accuracy, dependability, and inclusion.

Cross-Training and Role Expansion

Another success story at G&W Electric includes a young man named Robert who was hired into a role in the customer service department. Historically, this was a position of exceedingly high turnover as it required heavy attention to detail and strong independent work skills. At its core, this job required somebody to ensure that all invoices were appropriately tracked, documented, and filed. This task necessitated constant upkeep at the risk of producing a heavy backlog of documents and it was a steady thorn in the side for departmental leadership. After much turnover, the position was targeted as an opportunity for a neurodivergent worker.

In the same manner as the production jobs, natural supports and training were implemented to ensure that the job was appropriately accessible for neurodivergence. A skills demonstration was conducted and, ultimately, Robert was selected as the best candidate for the job. He joined the team and made an immediate impact, eliminating a nearly year-long backlog in a matter of weeks. (As an aside, during the candidate selection meeting, it was noted that

Robert scored among the highest percentile for attention-to-detail in G&W Electric's pre-employment competency assessment given to all applicants.)

Robert eventually expanded to a full-time role and received training on year-end duties. The leadership gained back much of their day, no longer being forced to pick up the slack from an ever-growing stack of unfiled invoices. The possibility of going paperless, a high-level goal that once felt illusive, now felt realistic and practical. Robert is still effectively producing for G&W Electric to this day, over two years later.

Though exemplary by default, Robert is far from the only such example. Ed, a former contract employee hired in 2020, performed above and beyond before accepting a permanent full-time position as an Assembler. Gabe, a part-time Inspector in the EPOX department since 2021, has added to his resume by taking on multiple responsibilities in assembly and other areas of EPOX – always doing so with a bright smile on his face. And, most recently, Nick, a contract worker brought in during the Fall of 2022, was hired on permanently as a Material Handler in the Central Warehouse.

Abdul Basraoui, Warehouse Manager for G&W Electric Co., shared these thoughts when asked about Nick. "Nick is a pleasure to work with, he is consistent and on-time. He asks questions when he doesn't understand and chances of him doing the wrong thing, simply by taking a guess, are nearly zero." Nick's professionalism, sociability, and natural problem-solving skills helped him shine early into his tenure at G&W Electric. Basraoui continued by sharing, "Nick is excellent at sticking to his task and ensuring accurate counts of warehouse stock levels, which

allows us to run our business more efficiently. He requires upfront instruction, however, once that is understood he executes accurately and with minimal managerial oversight needed."

An Unexpected Unicorn

Embracing a neurodiverse workforce introduces candidates who may not otherwise pass an initial ATS screening. For the right company, this embrace can be history-defining. One such case is that of Kevin, an engi-

neer and certified calibration technician.

Kevin submitted for an entry-level skills demonstration, hoping to get his foot in the door and work up to a career in engineering. It was determined that Kevin was not the best fit for the entry-level job. Quite simply, he didn't possess the required fine motor skills, but he did hold a degree in engineering and impressed everybody with his professionalism and knowledge. Later that year, a position opened in the engineering department, and Kevin was invited back for a formal interview before ultimately accepting the role.

Kevin worked hard to meet the demands of his new job and soon decided to work towards a certification in becoming a calibration technician. After months of studying, he took the exam and passed. Throughout the entire history of G&W Electric, Kevin is the very first to ever achieve this distinguished certification. Effective skill-matching was the pathway toward this perfect pairing, but had it not been for the foundational work required to hire and retain a neurodiverse workforce, this match likely would have never manifested.

Strengthening Workforce through Community

Not to be missed among the myriad of benefits in workplace neurodiversity is that of community engagement and brand awareness. To be known as a truly inclusive employer is to immediately be set apart from other organizations vying for top talent in today's tight labor market. A creative workforce solution requires a creative approach to recruitment, including strategic partnerships with high schools and community agencies.

Katie DiCianni is the High School Transition Director for Hinsdale District 86, a local school district that has helped place four employees at G&W Electric. When asked about the neurodiverse hiring initiative, she shared, "It has provided an opportunity for our students to be supported while being shown that they are a contender for a job. The support and feedback we have received has been beyond any that we have received before from an employer. It really allows an under-employed population to have meaningful employment." Hinsdale

District 86 recently celebrated one of their most successful school years of all time, setting records for job placements with various employers across the county. Yet, G&W Electric stands apart from many others as a workplace where these students will gain valuable experiences and an opportunity for a long-term career.

American Sustainability

Earlier this year I wrote a piece on the intersection of neurodiversity and the current climate of the American workforce. I stated that the future of workforce development will require a sense of cultural innovation paralleling that which championed the integration of women into the workforce during and after WWII. Today, companies like G&W Electric, Gilster-Mary Lee, and Magnetic Inspection Laboratory have shown that this caliber of cultural innovation, as it pertains to neurodiversity, carries a strong return on investment.

Each of these three companies has achieved competitive, integrated employment outcomes for neurodivergent workers. Many of us may expect employment to inherently be competitive and integrated by nature; however, in the world of disability employment, that is often not the case. Many neurodivergent workers are sequestered to sub-minimum wage employment, sheltered workshops, dead-end jobs, and enclave-style work that leaves workers on a proverbial "island." Regardless of their capability, for many neurodivergent workers, competitive, integrated employment can feel unattainable. These three companies, however, showcase that the potential, not just for job outcomes, but for significant social and financial impact, is, in fact, attainable through a creatively holistic approach.

Not every worker is going to be right for every job. But every worker is right for a job. The most harmonious workplaces are those that best match skill sets across an organization and allow for people to be engaged in tasks that adequately challenge their abilities. That's the idea that drove American innovation through World Wars and global pandemics and I believe it's the key to unlocking long-term sustainability for our nation's single greatest resource – our people. ♦

DECIDING BETWEEN SYNTHETIC & NATURAL GRAPHITE FOR LIB ANODES IN THE ELECTRIC VEHICLE ERA

SUPERIOR GRAPHITE

The electric vehicle (EV) revolution is steering the lithium-ion battery (LIB) industry into uncharted territory, and at the heart of this transformation lies the critical choice between synthetic and natural graphite for LIB anodes. As we stand on the cusp of a new era in transportation, this exploration aims to unravel the intricacies of this decision-making process, shedding light on why synthetic graphite emerges as the strategic preference.

Two Distinct Types of Graphite

Let's first delve into the two primary incarnations of graphite: synthetic and natural. Crafted through high-temperature processes, synthetic graphite boasts unmatched purity and performance. In contrast, natural graphite is directly sourced from geological formations, existing in flake and vein varieties. Our focus here is on articulating why synthetic graphite takes the lead as the preferred choice in industrial applications.

Synthetic Advantage: Immediate Demand and Short-Term Progress

Both synthetic and natural graphite boast mature technologies, making them viable contenders for LIB anodes. However, the urgency of the next five years pro-

pels synthetic graphite into the limelight. Its existing infrastructure and mature technology provide a crucial edge in meeting the skyrocketing demand for EVs. While we recognize the phased integration of natural graphite for long-term sustainability, the spotlight is on repurposing existing resources through synthetic graphite brownfield projects. This strategic approach ensures a gradual and seamless transition, acknowledging the importance of both types in shaping the future of anode technology.

Security Considerations: Ensuring Resilience

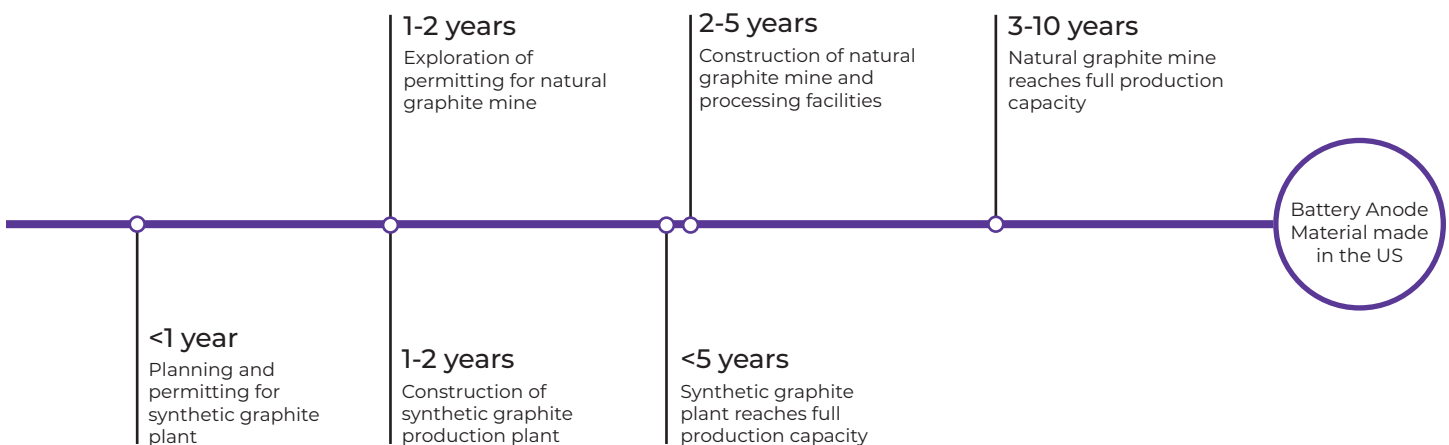
Security concerns loom large over the graphite industry, especially given the complexities of the global supply chain. The reliance on imports, particularly from China for natural graphite, poses significant risks to the stability of the supply chain. Geopolitical uncertainties and trade tensions further accentuate the need for strategic prudence. In response, we advocate for diversifying supply sources, enhancing cybersecurity measures, and fortifying domestic production capacities. This multifaceted approach mitigates vulnerabilities, ensuring resilience against disruptions that could reverberate across critical industries such as electric vehicles and defense.

Stewardship of the Environment: A Sustainable Trajectory

Turning our attention to the environmental front, the production of synthetic and natural graphite raises crucial considerations for the viability of LIB anodes. While synthetic graphite production entails significant emissions, my proposal involves mitigating this impact by sourcing renewable energy within the U.S. This strategic shift aligns with a broader vision of steering production toward a low-carbon trajectory. On the flip side, the initial low carbon impact of natural graphite hinges on responsible mining practices and meticulous land-use management.

Comprehensive Environmental Assessments: Beyond Carbon Metrics

Life Cycle Assessments (LCAs) play a pivotal role in evaluating the environmental impacts of graphite production. While carbon metrics are undeniably crucial, our discussion emphasizes a holistic approach. LCAs must extend beyond mere carbon equivalent figures, encompassing a broader range of environmental consequences. This includes evaluating energy consumption, water usage, waste generation, and land-use changes. I'd like to underscore the importance of transparent data collection methods, emphasizing the use of primary data for accuracy and pertinence.

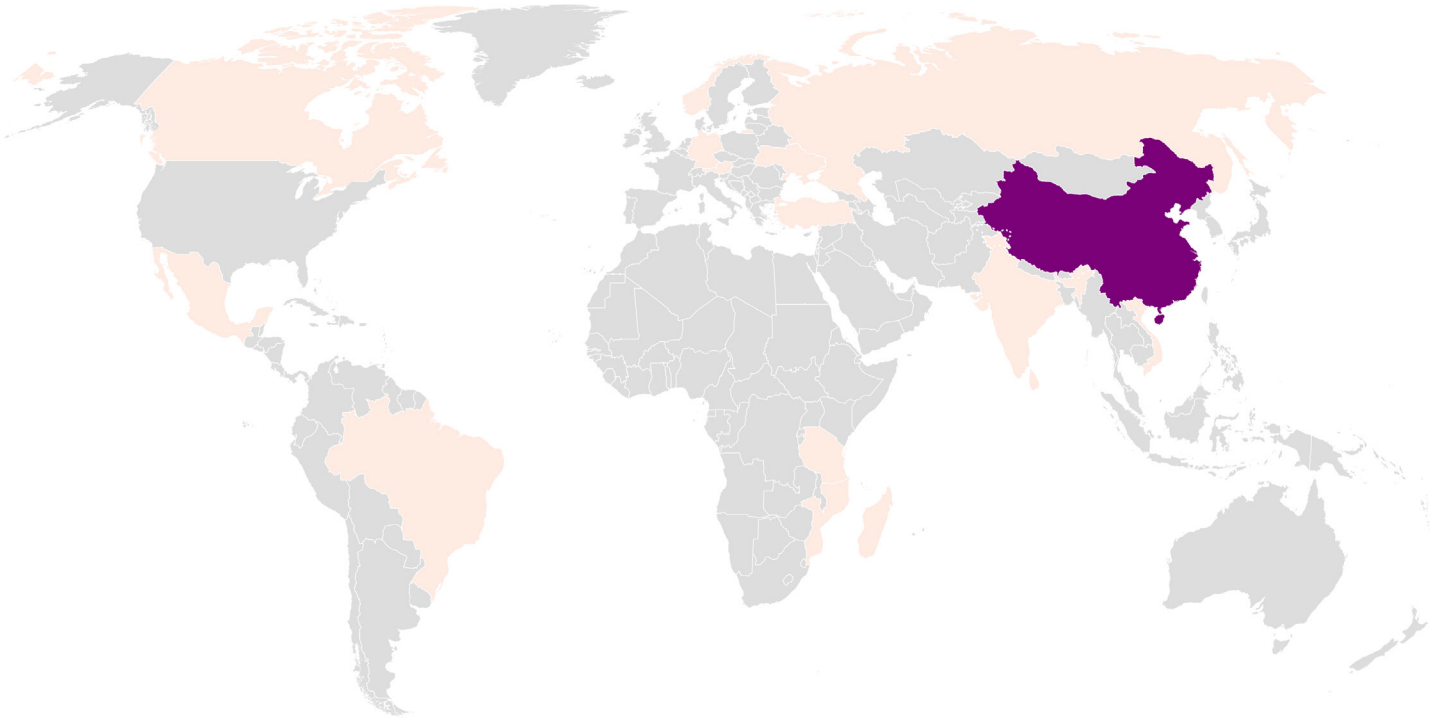


About the Author: Rijo Jacob Robin is Group Product Manager at Superior Graphite. He may be reached at RRobin@superiorgraphite.com.

Major countries in worldwide graphite production 2022

(in 1,000 metric tons)

< 170 170–340 340–510 510–680 ≥ 680



Created with Datawrapper

Strategic Guidelines: Crafting a Sustainable Blueprint

Balancing feasibility, environmental stewardship, and security demands a nuanced approach. The urgency of demand necessitates leveraging the technological maturity of synthetic graphite to address short-term needs. Simultaneously, we emphasize the importance of responsible extraction of natural graphite, with a keen focus on environmental impacts for long-term sustainability. The commitment to green energy sources within the U.S. holds the potential to reshape the carbon profile of synthetic graphite. Security concerns further highlight the importance of proactive supply chain resilience and robust cybersecurity measures.

Toward a Sustainable Energy Evolution

In conclusion, the utilization of synthetic and natural graphite for LIB anodes marks a crossroads of technological advancement, security imperatives, and environmental consciousness. The strategic roadmap outlined envisions a sustainable energy evolution for the United States. By intricately weaving technological prowess, innovation, and collaborative industry efforts into a holistic strategy, we have the opportunity to pave the way for an energy horizon characterized by security, environmental responsibility, and resilience against future challenges.

Key Factors in Evaluating Graphite Investments

For industry professionals contemplating graphite investments, it's crucial to underscore key considerations. Capital and operating expenses, production rates, marketing plans, and potential value additions play pivotal roles in determining profitability. However, the complexity of the research landscape and the limited availability of data underscore the need for prudence in decision-making. As we navigate this pivotal juncture, it's imperative to grasp the specifics of the sector, acknowledging its complexities and uncertainties. This critical approach is indispensable for making informed decisions that not only align with sustainability goals but also contribute to the evolution of a resilient and eco-friendly graphite industry for the future. ♦

NEW YEAR, NEW LAWS - WHAT EMPLOYERS NEED TO KNOW FOR 2024

BARNES & THORNBURG LLP

At the year's end, it is always helpful to look back in order to be fully equipped to move forward. Employers should adopt this approach to ensure compliance with changes to employment law. Laws consistently change and develop at the state, local, and federal levels, impacting employers' obligations and often expanding employee rights. This article will provide a year-end review of the various laws passed at the state and federal levels, some of which went into effect in 2023 while others have an effective date of January 1, 2024. Many of these laws will increase and complicate an employer's costs and administrative burden.

Employment Law Developments at the State and local level:

Paid Leave for all Illinois employees

Throughout the year there have been several discussions regarding paid leave for all employees on the state, county, and local municipal levels. These laws will make it difficult for employers to navigate this issue. First, the State of Illinois passed a Paid Leave for All Workers Act (PLFAW), granting all employees a minimum of 40 hours of paid leave in a 12-month period. Employers may front-load the 40 hours of leave or allow employees to accrue leave at a pro rata basis; the use of either method will determine whether employers are required to allow employees to carry over accrued unused leave year to year. If employers front-load paid leave - providing all 40 hours of leave at the beginning of the 12-month period - they are not required to permit carryover of accrued unused leave year to year. However, if employers require employees to accrue paid leave, employees are entitled to carry over a maximum of 40 hours of accrued unused leave each subsequent year, the 12-month period established by the employer; the required accrual rate is 1 hour for every 40 hours worked.

Although carryover is required if employees accrue leave each pay period, the PLFAW does not impose any financial obligations such as payout of accrued unused leave at termination or separation, unless the required paid leave is accrued

and applied to an employee's vacation bank. If paid leave is accrued and applied to an employee's vacation account then the employer must pay out all accrued unused leave at termination; this requirement complies with employers' obligations under the Illinois Wage Payment and Collection Act rules and regulations. Employees who transfer to different positions in different divisions are entitled to retain all accrued paid leave from their previous position. Additionally, all accrued unused paid leave must be reinstated for employees who were separated and subsequently rehired by the same employer within 12 months.

Employers have administrative obligations under the PLFAW. Employers must maintain a written policy that satisfies the requirements under the PLFAW, and post the policy and written notices, to be provided by Illinois's Department of Labor, in a conspicuous place where notices are customarily posted. Employees must receive notification of any policy changes within five calendar days of the effective date of any imposed change. Employers are obligated to maintain records for at least three years that demonstrate the amount of paid leave accrued and taken, including the remaining paid leave balances for each employee. Employers that provide paid leave through an accrual method must provide employees with the amount of paid leave accrued and used at the employee's request. Employers must maintain coverage for the employee and any family member under any group health plan for the duration of leave used under the PLFAW.

On December 14, 2023, Cook County passed its Paid Leave Ordinance, which mirrors many of Illinois's requirements. If you are an employer in Cook County and unsure which law is applicable, the PLFAW law exempts employers from its requirements of the PLFAW if a county or local municipality had a paid leave act in effect prior to the effective date of the PLFAW. Cook County's leave ordinance is effective December 31, 2023, and the PLFAW is effective January 1, 2024. Therefore, if an employer is located in Cook County, the Cook County Paid Leave Ordinance applies and

the employer is exempt from the PLFAW. All employee rights and employer obligations provided under the Illinois Paid Leave Act are the same under Cook County's Paid Leave Ordinance.

The City of Chicago also passed a paid leave ordinance - Chicago Paid Leave and Paid Sick and Safe Leave Ordinance - but delayed its effective date from December 31, 2023, to July 1, 2024. This ordinance impacts employers who have employees who physically work in the City of Chicago for at least 80 hours within a 120-day period, impacting remote and hybrid employees who live in Chicago but work for employers located in different cities. Chicago's Paid Leave and Paid Sick and Safe Leave Ordinance requires all private employers and City of Chicago and sister agencies to provide all employees, part-time and full-time employees, 10 days of paid leave, 5 days of paid sick leave, and 5 days of paid leave. Employers may front-load leave or allow employees to accrue paid leave. If paid sick leave and paid leave are accrued, the accrual rate is 1 hour for every 35 hours worked, with a maximum accrual amount of 40 hours.

If employers meet the requirements of the Chicago Paid Leave and Paid Sick and Safe Leave Ordinance through accrual, nuances apply and are complicated; front-loading leave minimizes these complications. Paid sick leave accrual will begin at the commencement of employment but use is delayed until after 30 days of employment; use of paid sick leave may occur in increments of two hours. A maximum of 80 hours of paid sick leave may be carried over each year. Paid leave accrual will begin at the commencement of employment but use is delayed until after 90 days of employment; use of paid leave may occur in increments of four hours. A maximum of 2 hours of paid leave may be carried over each year if paid leave is not front-loaded. Employers are not required to payout for accrued unused paid sick leave. This differs for paid leave. Employers are required to pay out accrued paid leave at tiered levels: employers with 50 employees or less are not required to pay out paid leave; employers with 51-100 employees are re-

quired to pay out two days of accrued unused leave until January 1, 2025, then the payout requirement will increase to seven days; and employers with 101 or more employees are required to pay out all accrued unused leave, a maximum of seven days.

Employees may use paid leave under the PLFAW and Cook County's Paid Leave Ordinance for any reason and documentation is not required. However, Chicago employers may request documentation for the use of paid sick leave after three consecutive days of use. Private rights of action are permitted under Cook County's Paid Leave Ordinance and Chicago Paid Leave and Paid Sick and Safe Leave Ordinance, but not under Illinois's Paid Leave Act. Employers must maintain written policies, notify employees of their rights under the applicable law, and post information regarding the policies and employees' rights in conspicuous places.

Further information regarding employee rights and employer obligations under Chicago Paid Leave and Paid Sick and Safe Leave Ordinance can be found on the [Chicago Chamber of Commerce website](#).

Unpaid Leave Extends to Various Events

On July 28, 2023, the Victims' Economic Security and Safety Act (VESSA) was amended to provide leave to employees who are grieving a family member's death from a violent crime. The amendment grants employees 10 unpaid, cumulative work days to: a) attend the funeral or wake, or an alternative, of a family or household member who is killed in a violent crime; b) make arrangements for the family or household member that was killed in a violent crime; or c) to grieve the death of a family or household member who was killed by a violent crime. The ten cumulative days of leave must be taken within 60 days of the date of notice of the death to the employer from the violent crime. This Act does not grant employees the right to take this leave in addition to or in excess of the employee's bereavement leave or leave granted under VESSA. Employees are granted leave based on the size of the employer: an employee working for an employer that employs at least 50 employees shall be entitled to a total of 12 workweeks of leave during any 12-month period; an employee working for

an employer that employs at least 15 but not more than 49 employees shall be entitled to a total of 8 workweeks of leave during any 12-month period; and an employee working for an employer that employs at least one but not more than 14 employees shall be entitled to a total of 4 workweeks of leave during any 12-month period.

Child Extended Bereavement Leave Act

Employees at private companies are now entitled to unpaid leave if their child dies by suicide or homicide. Small employers (50 employees or more) and large employers (250 employees or more) are required to grant employees unpaid leave if their child dies by suicide or homicide - small employers must allow for six weeks of unpaid leave and large employers must allow for 12 week weeks of unpaid leave. Employees are entitled to take leave continuously or intermittently, in increments of no less than four hours. Employees must use the allotted leave within one year of the employee's notification of the death of their child to the employer. Employers may require notification of the employees' intended use of leave and require reasonable documentation that includes the cause of death, such as a death certificate, verification of death, or a published obituary. Child bereavement leave is included in the leave granted under VESSA and may not be taken in addition to unpaid leave permitted under the Family and Medical Leave Act (FMLA), and may not exceed the allotted unpaid leave allowed under FMLA.

Equal Pay for Temporary Workers

Temporary workers received an expansion of rights too. On August 4, 2023, Governor Pritzker expanded the Day and Temporary Labor Workers Act requiring that temporary workers receive pay and benefits that are equal to a directly hired employee after temporary workers work more than 90 days (consecutively or intermittently) at a third party client (the employer). In addition to equal pay and benefits, employers who use temporary workers, must only use agencies that are registered with the Illinois Department of Labor, maintain records as specified by the Act, and report

to staffing agencies when there is a strike, lockout, or other labor dispute occurring at the third party client's premises.

Pay Transparency - Illinois Amends its Equal Pay Act

Effective January 1, 2024, employers with 15 or more employees must include in job postings the wage and salary range for the position, including general benefits and other compensation factors. These requirements apply to all job postings, whether external or internal, including new hires, promotions, and transfers. Employers are required to post, announce, or otherwise make known to all employees opportunities for promotion prior to making any promotional decision. Lastly, employers must maintain records for each employee containing a statement that the salary range, benefits, and other compensation for the position in which the employee holds, was made known to the employee for each employment opportunity.

Freelance Worker Protection Act

Effective July 1, 2024, freelance workers must be paid the contracted compensation amount on or before the due date listed in the terms of the contract. If the contract does not specify when the contracting entity must pay the contracted compensation or the mechanism by which the date will be determined, compensation shall be due no later than 30 days after the completion of the freelance worker's services under the contract.

Contracting entities retaining freelance workers for products or services must provide the freelance worker with a written contract that includes: (1) the name and contact information of both the contracting entity and the freelance worker, including the mailing address of the contracting entity; (2) an itemization of all products and services to be provided by the freelance worker, the value of the products and services to be provided under the terms of the contract, and the rate and method of compensation; (3) the date on which the contracting entity must pay the contracted compensation or the mechanism by which such date will be determined, which shall

be no later than 30 days after the products or services are provided; and (4) the date by which a freelance worker must submit a list of products or services rendered under such contract to the contracting entity, if such a list is required in order to meet any internal processing deadlines of the contracting entity for the purposes of compensation being timely.

The contracting entity must retain the contract for the service of a freelance worker for no less than 2 years and shall make such contract available to the Illinois Department of Labor upon request. Contracting entities are prohibited from threatening, intimidating, disciplining, harassing, denying a freelance opportunity to, or taking any other action that penalizes a freelance worker for, or is reasonably likely to deter a freelance worker from, exercising or attempting to exercise any right guaranteed by this Act, or from obtaining any future work opportunity because the freelance worker has done so.

Paid Leave for Blood or Organ Donation

Employers with 51 or more employees must provide full-time employees, who have been employed with the employer for more than six months, paid leave to donate blood or an organ. An employee may use up to one hour, or more if authorized by the employer or a collective bargaining agreement, to donate blood every 56 days in accordance with appropriate medical standards established by the American Red Cross, America's Blood Centers, the American Association of Blood Banks, or other nationally recognized standards. An employee may use up to 10 days of leave in any 12-month period to serve as an organ donor. This will go into effect on January 1, 2024.

Employment Law Developments at the Federal level:

Protections expand for pregnant workers under the PWFA.

The Pregnant Worker's Fairness Act (PWFA) went into effect on June 27,

2023. PWFA requires covered employers to provide reasonable accommodations to a worker's known limitations related to pregnancy, childbirth, or related medical conditions unless the accommodation will cause the employer an undue hardship. This requirement may sound similar to employers' obligations under the Americans with Disabilities Act (ADA) because it is, as it relates to the interactive process. Employers are required to engage employees who are affected by their pregnancy in the interactive process to determine the reasonable accommodation needed for that employee. Employers are prohibited from requiring employees to take leave, whether paid or unpaid, when a reasonable accommodation is available, or accept an accommodation that was not agreed upon during the interactive process.

The salary threshold for exempted employees may increase under the FLSA

On August 30, 2023, the U.S. Department of Labor (Department or DOL) issued a Notice of Proposed Rulemaking that would raise the minimum salary threshold required to qualify for the Fair Labor Standards Act (FLSA) overtime exemptions for executive, administrative, and professional (EAP) workers by over 50 percent. The proposed salary increase for these exempted positions is \$1,059 per week (\$55,068 per year) from the current \$684 per week (\$35,568 per year). If passed, this change would impact employer's personnel budgets significantly, especially because the Department of Labor is proposing to automatically increase these salary thresholds every three years.

Anticipated Developments in 2024:

The Use of Artificial Intelligence (AI) in Employment Recruitment and Selection

Although no federal or Illinois legislature has been passed for regulation developments related to the use of AI in 2024, employers that use AI tools for assistance in recruitment and selection should be aware that the EEOC could find them liable for the tool's discriminatory impact.

The EEOC puts the burden of compliance squarely on employers. "[I]f an employer administers a selection procedure, it may be responsible under Title VII if the procedure discriminates on a basis prohibited by Title VII, even if the test was developed by an outside vendor," the agency states in its technical assistance guidance. The employer may also be held responsible for agents' actions, including software vendors, if the employer has given them authority to act on the employer's behalf. "This may include situations where an employer relies on the results of a selection procedure that an agent administers on its behalf," the EEOC stated in the guidance.

As technology continues to develop AI, employers must remain diligent in ensuring that the "algorithmic decision-making tools available to assist them in making employment decisions, including recruitment, hiring, retention, promotion, transfer, performance monitoring, demotion, dismissal, and referral" do not create a disparate impact. Because AI tools are used for recruitment and selection purposes, the algorithm - the instructions code into a computer to process data to evaluate, rate, and make other decisions about job applicants and employees - must comply with the EEOC's Uniform Guidelines on Employee Selection Procedures under Title VII. These Guidelines require employers to assess whether the selection procedure, in the case of AI, the algorithmic decision-making tool, has an adverse impact on a particular protected group by checking whether the use of the procedure causes the selection of individuals from any one group substantially leads than individuals in another group. Although employers do not develop the software or algorithm used to make selections, the employer may still be liable for any disparate impact the tool creates. To avoid risk, employers are encouraged to engage in dialogue with their vendors to ensure the necessary steps were taken to evaluate whether the use of the vendor tools causes a substantially lower selection rate for individuals with a characteristic protected by Title VII. ♦

CELEBRATING 130 YEARS OF BOLDLY MOVING MAKERS FORWARD

As the Illinois Manufacturers' Association marks its 130th anniversary, it's a momentous occasion to reflect on the organization's rich history and its enduring impact on the state's industrial landscape. Established in 1893 with the support of seven founding members, Amsted Industries Inc, Brunswick Corp, Commonwealth Edison, Deere & Company, Henkel AG & Co. KGaA, Peoples Gas, and Tablet & Ticket Co., the IMA has been a steadfast advocate for manufacturers, fostering growth, innovation, and economic development.

In the late 19th century, Illinois witnessed an industrial awakening, and amid this transformative period, the IMA was born. Crafted by forward-thinking leaders who recognized the need for a collective voice to champion manufacturers' interests, the association emerged as a guiding force, propelling the state's industrial growth. On November 23, 1893, the bylaws and certificate for organization, "to be known as the Illinois Manufacturers' Association," were filed with the Secretary of State, stating "the object for which this Association is formed is to protect and further the business and interests of the manufacturers in Illinois, to develop the relations existing between them, and to facilitate the interchange of ideas relating to any kind of manufacturing industry in said State."

The IMA has long been ahead of its time, organizing and providing services and benefits never before offered by an association in the business sector. One being the "Pink Sheet" which was a printed digest of daily legislative proceedings that the IMA first published in 1915. The IMA organized around many pressing issues to manufacturers from the Illinois Manufacturers' Casualty Association to combat liability insurance rates rising, the Illinois Manufacturers' Costs Association to address the need for an accurate cost-finding system, and the War Industries Board (which word later become the Illinois Industrial Council) to team up Illinois manufacturers with the WWI effort, amongst many more.

As Illinois thrived in the post-war era, the IMA played a pivotal role in guiding manufacturers towards global competitiveness. The association's commitment to economic development and technological innovation became a driving force, solidifying its reputation as a global influencer with deep local roots. The IMA's proactive stance on policy advocacy ensured that Illinois manufacturers

remained leaders in an ever-evolving marketplace.

Jason Francque, Director of U.S. State Affairs at John Deere noted, "As one of the IMA's founding member companies, John Deere deeply understands the immense positive impact the IMA has had on the development of Illinois' manufacturing industry, communities in which our employees live, and the overall economic health of the State of Illinois." He continued, "As someone who has worked with the IMA in some capacity over the last thirty years, my own view is that the organization has never been stronger and its work more important given the challenging policy issues that face our business today from environmental stewardship to artificial intelligence and many more. IMA has become one of the premier business associations in the United States, and we are very proud to have played a small role in its formation and continuous advancement and progress over the years."

The IMA's ability to navigate challenges has been a constant throughout its 130-year journey. From the industrial shifts of the early 20th century to the complexities of the modern globalized economy, the association has continuously adapted, ensuring that manufacturers remain at the forefront of progress. The IMA's resilience is not just a testament to its history but a blueprint for manufacturers facing the challenges of today and tomorrow.

DeShana Forney, Senior Director-Government & Community Relations at Peoples Gas & North Shore Gas shared, "For generations, Peoples Gas and North Shore Gas have safely and reliability delivered energy to customers across Chicago and 54 communities in the northern suburbs. As founding members of the Illinois Manufacturers' Association, we are excited to celebrate the IMA's 130th Anniversary." She continued, "Through decades of collaboration, the IMA has been a cornerstone of support for Peoples Gas and North Shore Gas. Its unwavering advocacy and shared vision for a thriving economic landscape have played a pivotal role in our success. From fostering innovation to championing regulatory initiatives, the IMA has been a trusted ally, contributing to the growth and sustainability of our communities."

"Together, we've embraced opportunities for progress and faced challenges head-on. The IMA's dedication to promoting a robust business environment has complemented Peoples Gas' and North Shore Gas'

missions to deliver efficient and sustainable energy solutions. As we celebrate this anniversary, we extend our gratitude to the Illinois Manufacturers' Association for its enduring support and shared commitment to powering the future," Forney exclaimed.

As the Illinois Manufacturers' Association embarks on its next chapter, the legacy of boldly moving makers forward continues. The association's commitment to innovation, advocacy, and fostering a vibrant manufacturing community positions it as a critical player in shaping the future of Illinois industry. With an eye on technological advancements, sustainable practices, and the evolving needs of manufacturers, the IMA stands poised to lead the way for the next 130 years.

"It's an honor to represent manufacturers that make the world a better place to live every single day whether producing lifesaving medicines, feeding the world, moving people and product, ensuring our national defense, building our infrastructure, or powering our homes and businesses. Manufacturing is the single greatest driver of innovation and progress in our nation's history," said Mark Denzler, President & CEO of the Illinois Manufacturers' Association. "Amazing manufacturers have led the way through every major challenge in our history and are poised to do so in the future. I don't know what obstacles we'll face in the future, but I do know that Illinois manufacturers will create solutions to our greatest challenges and the IMA will be standing alongside as a trusted partner every step of the way."

The IMA has never lost sight of its mission statement written 130 years ago: The object for which the Illinois Manufacturers' Association is formed is to strengthen the economic, social, environmental and governmental conditions for manufacturing and allied enterprises in the state of Illinois, resulting in an enlarged business base and increased employment. Celebrating 130 years is not just a milestone for the Illinois Manufacturers' Association; it's a celebration of resilience, progress, and a legacy of moving makers forward. From inception to the present day, the IMA's journey reflects the dynamic spirit of Illinois manufacturing, and we are honored to stand together with our seven founding members on this momentous occasion. As we raise a toast to the past, present, and future, here's to the next 130 years of boldly advancing innovation, advocating for progress, and propelling Illinois manufacturers to new heights. ♦

EFFICIENCY UPGRADES: IMPLEMENTING ENERGY SAVINGS PROJECTS

CONSTELLATION

Now that your organization has successfully set a [greenhouse gas \(GHG\) baseline](#) and begun to analyze an accurate view of your facilities' energy usage and patterns using [utility expense management](#) platforms, it is time to consider what energy efficiency opportunities your organization can take to advance your sustainability goals. The U.S. Department of Energy (DOE) identifies energy efficiency as one of the easiest and most cost-effective ways to combat the climate crisis, reduce consumer energy costs, and improve U.S. businesses' competitiveness.¹

Energy efficiency projects are accessible, affordable and can directly lower GHG emissions while also reducing utility bills. These upgrades can come in the form of simple infrastructure improvements, such as LED lighting and HVAC upgrades, or can be as advanced as [deep energy retrofits](#). If your organization is considering implementing energy efficiency measures, here are some tips to start defining and prioritizing your upgrade projects.

Start With a List

Before any upgrades can be considered, engage with key decision makers across your organization to draft an Energy Efficiency Project list that includes potential upgrades that have become apparent after reviewing energy usage data. This list is instrumental when reviewing capital budgets, operations timelines and requirements of systems in need of replacement. Creating the list should help identify what initiatives need to be prioritized so that you can create an actionable strategy for implementation. The list also helps demonstrate the potential return on investment (ROI) of energy efficiency projects through long-term cost reduction and the life cycle assessment of current infrastructure, plus, it helps identify any available rebate or incentive programs.

Consider Funding Options Specific to Energy Efficiency Projects

Funding is still one of the most critical aspects of energy efficiency projects and not every company has the ability to finance a project upfront. Nearly 80% of energy buyers, when asked as part of the Smart Energy Decisions Sustainability Survey, mentioned budget concerns, with more than 30% of

respondents saying they required a mechanism to finance their projects.²

There are several funding options that your organization can consider to make your energy efficiency projects become a reality.

- **Performance Contracting:** Working with your energy service company (ESCO) can help you avoid paying upfront capital for energy efficiency projects, as they are funded through guaranteed cost savings over the life of your contract. This is a budget neutral financial structure providing customers with an avenue for payment and an immediate justification of their investment.
- **Design/Build Programs:** Funds for energy efficiency projects become available once capital requirements are met by the business.
- **On-bill Funding Programs:** Energy efficiency projects are recouped through monthly charges included in an electricity or natural gas supply bill. Constellation's Efficiency Made Easy® (EME) program is an on-bill funding program that helps customers identify, implement and fund efficiency improvements that can help reduce energy costs, modernize facilities and meet sustainability goals. You can realize cost savings through a reduction

in consumption and an improved load profile, which will positively impact future energy costs and your environmental goals. This unique award-winning solution has helped to fund over \$350 million in energy efficiency projects for more than 1,100 customers.

Monitor and Report on Your Energy Efficiency Programs

Constellation is looking at AI to decrease energy efficiency projects are implemented, utilizing your utility expense management system should make it easy to see tangible changes across your facilities' footprint. Additionally, some organizations have documented some of the non-financial or operational benefits, such as positive employee and customer feedback.

Take Action Today

Implementing new energy efficiency initiatives—even on a small scale—can initially sound overwhelming. However, investments in energy efficiency can translate into reductions in energy consumption and maintenance expenditures, enhanced system operations, and a reduced carbon footprint. Working with a trusted energy expert like Constellation can help your organization identify, implement and fund your energy efficiency projects. ♦



Constellation – 24/7 access to billing and energy usage data

POWERING OUR ECONOMIC ENGINE REQUIRES A MORE RELIABLE, RESILIENT ELECTRIC GRID

INVENERGY, LLC



As the state's leading economic engine, Illinois manufacturers play critical roles in supporting skilled jobs and generating products that are used around the world. But have you ever stopped to think about what keeps that engine running?

In short, it takes an enormous amount of energy. The industrial sector accounted for 33% of total U.S. energy consumption in 2022. Within the industrial sector, manufacturing accounts for more than 75% of annual industrial energy consumption.

As energy needs continue to increase for manufacturers – and in our broader communities – how can we be sure that we have access to enough reliable energy to keep moving forward when and where we need it?

Our ability to move power from where it's generated to our businesses and homes where it's consumed is contingent upon having a well-connected, reliable electric grid. These transmission lines are needed to transport electricity generated by an energy source to where it is most needed. There can be hundreds of miles between where energy originates and where it's ultimately used – meaning that reliable and resilient means of transmission are critical for uninterrupted supply.

However, the grid in the U.S. is outdated and in need of modernization. In fact, almost three-quarters of our transmission lines are over 25 years old, and some are as

old as 100. Regional grid operators are sounding the alarm about reliability challenges and power outages have doubled over the past two decades, largely due to severe weather events and increasing demand for electricity. And because of the interconnected nature of the grid, energy disruptions that start in one area can quickly cascade – causing power outages across multiple states and regions.

The importance of a reliable and resilient grid is clear for the manufacturing industry. Modernizing our transmission lines will allow us to access more clean domestic energy sources that are affordable and plentiful. The challenge is that the permitting and planning processes for new transmission lines are inefficient in their current state, slowing down much needed grid updates and the ability for the U.S. to reach its full clean energy potential.

The good news is that there are projects underway, including some that would have major benefits for Illinois businesses and consumers. One such transmission line is the Grain Belt Express, which will move more clean power farther and deliver more carbon emissions reductions than any other American infrastructure project. Connecting four states, across 800 miles, Grain Belt Express will carry more affordable, reliable power to the Midwest and deliver 100% domestic, clean electricity to power 3.2 million American homes. It is projected to save Illinoisans more than

\$4.3 billion in energy costs over 15 years.

The line will accomplish this by transporting renewable energy generated in Kansas to neighboring “power pools” that serve consumers in Missouri, Illinois, Indiana, and elsewhere across the Midwest and other regions. The line will bring access to diverse new sources of low-cost, domestic, primarily renewable clean energy, powering prosperity for local Illinois communities, investing in equitable jobs for workers, and meeting Illinois' ambitious state energy goals.

Recognizing the importance of reliable energy delivery to the industry, the Illinois Manufacturers Association has been very supportive of this project as it winds its way through the state approvals process. The backing of manufacturers and other industry players in grid modernization efforts is incredibly effective in helping to elevate this issue among policymakers and the broader business community.

As our infrastructure struggles to keep pace with increasing demand, it's clear that investing in energy transmission provides across the board benefits for American consumers, workers, and the environment, and its expansion is critical for maintaining affordable and reliable electric service. It's time to move these modernization projects forward to ensure reliable, resilient, and affordable energy that Illinois manufacturers, businesses, and consumers can count on. ♦

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WELCOME TO THE NEW IMA BOARD CHAIR: RENEE TOGETHER

You've played many different roles at Azteca from helping your mother pack and deliver tortillas as a child to working in sales and marketing, and now leading the company as President. Can you tell us more about your career development and what you consider to be the most fulfilling part of your role today?

While in high school and college, I would work doing whatever needed to be done. Being owned by Pillsbury for 5 years also gave me some great experience and mentors. I also participated in Loyola's Next Generation Leadership Program. This was an 18-month program that helped me to prepare for a leadership role in our organization. The most fulfilling role today is working with our employees and developing a strong culture where our employees are happy and engaged. As I look back at the 53 years we have been in business, I know my parents must be so proud of what they built and how their legacy continues. My parents always wanted our employees, many of which were first-generation Mexican, to live the American dream and give their children the opportunity to do so as well.

Tell us about your background and how you chose manufacturing as a career?

I was 8 years old when my father (and soon after, my mother) began Azteca with a group of nine others. I watched them as they were involved in all parts of a business from operations, HR, Marketing, Sales, Accounting etc. I decided that I wanted to be in Marketing, so I went on to receive my degree in Business Administration with a concentration in Marketing. Although I worked in many areas of the business while growing up, I began my career after graduation working in sales. We were then purchased

by another company and I was able to move into a marketing role. Once our family and other investors purchased the company back, I continued to work in marketing and sales until I was selected to lead the business in 2009 when my parents retired. Being on the leadership team gave me a lot of exposure to the operations side of the business but I didn't have any responsibility over that side of the business until I became president.

What has been the biggest challenge you have faced in your career and how have you grown through it?

My biggest challenge was several years back when we lost some significant retail accounts. The retail landscape was changing and it was more and more difficult for a regional company of our size to compete. During that time, we changed our focus from mostly retail and began pursuing business in other segments such as food service, private label, and industrial. This allowed us to be much more successful. Although at the time, it was tough going through this, we definitely came out stronger.

You must feel a deep sense of pride and joy seeing Azteca thrive despite adversities over the years. Can you tell us what it means to you to lead your family's company in its second generation?

I am very honored and proud to lead our family business and excited to have the third generation working in the business as well. I am excited to continue the legacy my parents started to bring economic development to the area and provide stable employment opportunities to our workforce. Our mission is to "Add Sunshine to People's Lives." This includes our employees, customers, suppliers, communities, and families. As long as we focus on that, success follows.



How do you like to spend your free time?

I enjoy being a grandma and spending time with family and friends. I also enjoy traveling and spending time on self-development.

What advice do you have for young people who are interested in careers in manufacturing? Why should young people, returning veterans, or dislocated workers look at manufacturing as a career?

Manufacturing offers such a wide variety of benefits and opportunities including diverse career paths, job stability, competitive compensation, innovation opportunities, skill development, and even global opportunities to name a few.

I would recommend exploring different roles and opportunities within manufacturing to determine which would give you the most satisfaction. Then I would look for a mentor or someone who could help you decide what education and/or skill development you might pursue to pursue the career that you believe suits you best. This will help determine which career path is most beneficial. Some options are college, trade school, or even on the job training opportunities so you can develop the skills necessary.

What is the best piece of advice that you have been given throughout your career?

My father used to quote Napoleon Hill to me whenever I brought a challenge to him. It turns out to be the best advice: "Whatever the mind can conceive and believe, it can achieve." This reminds me to focus on the outcome I desire rather than on the problem or the negative circumstance. This has served me well.

What are your goals for the IMA as Chairwoman of the Board?

I am excited for this opportunity to help advance the Illinois

Manufacturers' Association's long record of achievements on behalf of the manufacturing industry. I look forward to continued collaboration with my colleagues from across the industry to grow jobs, opportunities, and investment. I also look forward to continuing to support the IMA's Women in Manufacturing initiative.

What is your proudest accomplishment in your career? In your life?

Besides having the honor of leading our family business, the proudest accomplishment in my career is the culture we have developed where our employees are happy, engaged, appreciated, and part of a work family that works together positively as a team.

Why should manufacturing companies join the IMA and what is the benefit of networking with other companies?

The IMA provides so many valuable services and information much more efficiently and cost-effectively than an organization trying to access these on its own. They provide advocacy, education and training, access to government resources, industry information and insights, and networking opportunities, to name a few.

Networking with other manufacturing companies can provide numerous benefits, including knowledge sharing, collaboration opportunities, access to resources, and increased business opportunities. It can be a valuable strategy for staying competitive and growing your manufacturing business.

What do you find exciting in manufacturing today, and what excites you the most about the future of manufacturing?

It's exciting to see all of the trends and developments that are shaping the future including AI, automation, robotics, machine learning, and IoT to name a few. ♦

THE COST OF NOT INNOVATING IN TODAY'S COMPETITIVE LANDSCAPE

Mandatory innovation? Imagine getting an unexpected window of free time for lunch with a good friend you have not seen for years. You think about taking them to a favorite restaurant and heading there only to find it closed for lunch that day. Many have dealt with this or similar disappointment. Restaurant owners struggle as once profitable operational times now capture fixed costs with no revenue to offset. How does this relate to the cost of not innovating?

Simply put, it is a simple and relatable example of lost revenue resulting from a lack of operational time/capacity.

Not staying current and taking advantage of innovation and new technology brings the same result in our manufacturing universe. With optimization of operational time/capacity as our baseline, we can now explore some costs of stagnation in the face of the many technological advances available. Specific focuses will be on the transformative combination of Automation, AI, and Robotics as we progress through these six looming costs.

Costs from lack of innovation

1. Lost Efficiency and Productivity

One of the most immediate costs of not innovating is the loss of efficiency and productivity. The failure to adopt automation and robotics can lead to increased labor costs, errors, and prolonged production times. Investing in these technologies enhances precision, reduces human errors, and fosters consistent quality, ultimately improving overall efficiency.

2. Higher Operational Costs

Contrary to the belief that innovation incurs significant upfront costs, the long-term consequence of avoiding these technologies is often even more financially burdensome. Manual processes result in higher operational costs over time due to increased errors, quality control expenses, and wasted resources. Automation mitigates these costs by minimizing errors and waste.

3. Competitive Disadvantage

Innovators face an appropriate ROI question when bringing costs forward for creative ideas and improvements. Unfortunately, many ROI equations aren't careful and assume competition is standing still. A first step in avoiding competitive disadvantage is recognizing that competition strives for innovation to disrupt the market.

Innovation in automation and robotics is crucial for maintaining a competitive edge. Companies that resist these technologies are disadvantaged as competitors leverage automated processes for faster turnaround times, higher product quality, and more competitive pricing. Supporting this, McKinsey's research on innovation points to higher growth rates and up to 40% high returns to shareholders for companies innovating successfully.

4. Inability to Meet Customer Expectations

Consumer expectations are evolving rapidly, driven by the seamless experiences provided by innovative companies. Businesses that fail to adopt automation and AI risk disappointing customers who expect efficiency, personalization, and responsiveness. (The restaurant example demonstrates this fact as well.)

5. Increased Risk of Obsolescence

In a rapidly evolving market, dependencies across a technology stack pose a significant risk of obsolescence. Companies that resist innovation may need help meeting evolving industry standards and may be overshadowed by more progressive competitors. Downtime risks increase as mechanical, automation, software, and other systemic components age.

6. Missed Opportunities for Growth

According to the Boston Consulting Group (BCG), innovation is a key driver of growth, and it opens new avenues for expansion. Companies that resist innovation find themselves confined to existing market

segments, need help to explore new possibilities, and limit their revenue and profit expansion potential.

Formalizing Your Innovation Strategy

PwC's Innovation Benchmark Report indicates that 54% of top-performing companies have objectives in place. Adding this to the above cost discussion points to formalizing a strategy via the steps below.

1. Establish Clear Objectives

Formalizing an innovation strategy begins with establishing clear objectives. Define whether the focus is improving operational efficiency, enhancing product quality, reducing costs, or exploring new revenue streams. This clarity guides decision-making and resource allocation.

2. Conduct a Technology Assessment

Evaluate the current technological landscape within your industry. Identify emerging trends and understand how competitors utilize automation, robotics, and AI. This assessment informs your technology adoption roadmap.

3. Allocate Resources

Devote necessary resources, both financial and human, to support innovation initiatives. Create a dedicated budget for research and development, training programs, and technology acquisition. Ensure teams have the time and resources to experiment and implement new technologies.

4. Foster a Culture of Innovation

Employee contribution of ideas and overall involvement in the innovation process is critical to creating a culture of innovation within the organization. Recognize and reward innovative thinking to reinforce the importance of creativity and forward-looking approaches. Acknowledge that innovation is an ongoing journey, not a destination. Encourage employees to embrace and contribute

to integrating new technologies. For example, provide training and skills enhancement programs to existing staff to help better understand the nuances of AI applications and work alongside robots more effectively. Cultivate a collaborative environment where employees perceive these technologies as tools to enhance their capabilities rather than replacements for their roles.

Creating a Leadership Position for Innovation

1. Key Responsibilities

Establish a leadership position responsible for orchestrating the innovation roadmap. Define responsibilities, including staying abreast of technological advancements, overseeing implementation, and fostering collaboration across departments.

2. Cross-Functional Collaboration

Facilitate collaboration between departments to encourage the sharing of insights and expertise. Work closely with operations, IT, marketing, and other relevant teams to identify automation and AI integration opportunities.

3. Training and Skill Development

A report from UdeMy highlights that over 40% of employees believe organizations don't invest enough to develop their skills. Companies need to spearhead initiatives for training and upskilling employees to adapt to new technologies and to develop training programs and workshops to ensure the workforce remains equipped for the evolving technological landscape. Remember that a team that isn't growing and moving forward contributes to an organizational knowledge drain.

4. Risk Management

Assess and manage the risks associated with innovation, addressing concerns related to data security, privacy, and potential disruptions during implementation. Work closely with risk

management and compliance teams to develop strategies to balance innovation with operational stability.

5. Measuring and Reporting

Establish key performance indicators (KPIs) to measure the success of innovation initiatives. Regularly report progress to the executive team and stakeholders, highlighting the impact on efficiency, cost reduction, and other relevant metrics. Transparency of this information will support the culture development aligned to both innovation and continuous improvement.

Initial Implementation Ideas....

1. Innovate a manufacturing process

Initiate robotic automation integration by identifying a specific manufacturing process that could benefit. This may involve targeting a repetitive task, a complex assembly, or a process requiring precision beyond human capability. Implementing robotic automation in manufacturing not only enhances efficiency but also serves as a tangible demonstration of the immediate impact of innovation on the production floor.

2. Integrate AI for Administrative Support

Simultaneously, explore the incorporation of AI into administrative functions, starting with fundamental applications. AI-driven tools can streamline data entry, analysis, and decision-making processes, reducing the burden on human resources and minimizing the risk of errors. For instance, deploying chatbots for customer support or utilizing AI algorithms for basic data analytics can provide a glimpse of the transformative power of artificial intelligence.

3. Extend Automation Across Operational and Administrative Functions

As the benefits of automation and AI become evident in isolated processes, progressively expand their implementation across both operational and administrative functions.

This expansion could encompass automating inventory management, order processing, machine tending, palletizing, safety, or supply chain logistics. Integrating AI further into administrative tasks, such as incorporating predictive analytics for inventory planning or utilizing AI-powered insights for strategic decision-making, adds a layer of sophistication to overall business processes.

4. Engage with Industry Experts

Consider collaboration with industry experts and consultants specializing in automation, robotics, and AI. These professionals can offer valuable insights into best practices, industry benchmarks, and technological advancements. Their expertise can guide your organization in making informed decisions and navigating the complexities of seamlessly integrating these technologies into your operations.

In conclusion, the cost of not innovating is not merely a financial consideration; it encompasses the risk of inefficiency, higher operational expenses, competitive disadvantage, customer dissatisfaction, obsolescence, and missed growth opportunities. By adopting a strategic approach, commencing with a specific manufacturing process, integrating AI for administrative support, and gradually expanding automation across operational and administrative functions, businesses can unlock the transformative potential of these technologies while minimizing risks.

In a world of relentless technological progress, businesses must recognize that embracing innovation is not just a strategic advantage but a necessity for survival and sustained success. The upfront costs of innovating pale compared to the long-term consequences of stagnation in the face of a rapidly evolving market. The choice is not merely between innovation and the status quo; it is a choice between relevance and irrelevance in the competitive landscape of the future. ♦

KEY CYBERSECURITY INSIGHTS FOR ILLINOIS ENTERPRISE ORGANIZATIONS

COMCAST BUSINESS

Robust cybersecurity measures are essential for enterprise organizations. These businesses often find themselves targets of cyberattacks thanks to the large amounts of sensitive – and therefore valuable – data they have. Despite having access to IT resources to mitigate threats, the cyber-threat landscape continues to evolve in the scale, complexity, and sophistication of its attacks. In fact, the [2023 Comcast Business Cybersecurity Threat Report](#) found that of the 24 billion attempted cybersecurity attacks in 2022, there were 500 unique threat types and 900 distinct infrastructure and software vulnerabilities.

In today's interconnected world, the disruption caused by cyberthreats can cripple operations, affecting productivity and compromising the integrity of systems and data. A breach can also result in substantial financial losses, legal repercussions, and damage to the organization's reputation. Illinois' enterprise organizations play a key role in ensuring both the health of the state's economy and the success of its workforce, so they cannot afford network downtime or loss of access to their networks.

To help protect against the latest threats in the cyber landscape, here are four key considerations from Comcast Business for enterprise organizations to keep in mind:

The rise of a distributed workforce requires foundational shifts in cybersecurity strategies.

An increasingly distributed workforce has resulted in rising adoption of the cloud, infrastructure-as-a-service, software-as-a-service (SaaS) applications, and the Internet of Things – meaning enterprises must put even more emphasis on a holistic approach to securing their networks. With hybrid work alongside distributed application architectures, it is critical to protect all traffic flows as users, corporate data and business-critical assets are now more likely to reside anywhere and increase an enterprise's exposure to security risks.

As organizations look to optimize their security measures, they are shifting toward software-defined wide area networking (SD-WAN), micro-segmentation, and threat response automation technologies. These solutions can streamline network threat monitoring and management, help businesses secure their corporate data, as well as manage the attack surface through network segmentation.

Knowing an organization's complete network footprint helps mitigate attacks.

If an enterprise organization is going to rethink its approach to cybersecurity solutions, first it must understand the full scope of its network and the potential points of risk. Organizations should have a clear view of all their assets, corporate data, personally identifiable information applications and systems whether on the network, in the cloud, or on a home user device.

When it comes to the cloud in particular, the use of cloud resources is very convenient, but oftentimes when a campaign is over, organizations forget to disable the application – which means it's still available and could be an outlet to threat. It's important that organizations are aware of their cloud footprint to ensure unused applications are removed. This added level of scrutiny and validation ensures businesses and customers aren't vulnerable to leaky, unused cloud apps that could cause a potential customer data breach.

New technologies offer workflow efficiencies but also create new potential for cyberattacks.

With the release of [ChatGPT](#) in November of 2022, generative AI — a branch of artificial intelligence that creates new text, images, video, and other content — went mainstream. While enterprise organizations have been exploring how it might support their operations, Generative AI's newfound position in the spotlight also brought with it discussions of how to prevent malicious

and inappropriate applications, dangers that become increasingly apparent when viewed through the lens of cybersecurity.

Not only can generative AI tools be used to take social engineering to new levels by creating more sophisticated attacks with more convincing text, images, video, and voice to target victims, but they also lower the barriers to entry for cybercriminals. Previously, hackers needed some combination of coding, writing, and/or graphic design skills to launch a convincing attack. Now almost anyone with the desire and access to the internet can do so.

To counter this, enterprise companies should start by thoroughly reviewing their security postures, including assessing current systems, identifying vulnerabilities, and making the necessary adjustments to increase protection. AI security and automation tools can strengthen network defenses and help level the playing field by distinguishing real threats from false alarms, thereby freeing security staff to focus only where they are needed most.

Partnering with a third party helps fill gaps in an enterprise's cybersecurity team.

The challenge of keeping up with the rapid pace of change in cybersecurity threats can be daunting, even for the most experienced IT teams. This is where a managed security service provider (MSSP), like Comcast Business, can help by bringing extensive expertise, resources, and up-to-date knowledge to the table. By partnering with an MSSP, organizations can effectively offload some of the burden of monitoring and responding to threats, allowing them to focus on their core business functions.

Comcast Business helps its enterprise customers better protect their networks and data via secure architectures leveraging solutions such as SD-WAN, DDoS mitigation, and other services in its extensive managed security portfolio. Contact the author or visit <https://business.comcast.com/> to learn more. ♦

2023 ANNUAL LUNCHEON

The IMA's 2023 Annual Luncheon celebrated the IMA's 130th Anniversary at the Sheraton Grand in Chicago on December 8 with more than 700 business leaders from across Illinois. Attendees participated in virtual breakout sessions leading up to the event, covering energy markets, economic conditions, and workforce challenges and solutions. Our Luncheon guests learned about the incredible work being done by Illinois manufacturers in 2023 from President and CEO, Mark Denzler. They also heard from renowned geopolitical strategist and author, Peter Zeihan, on the impact of world-spanning issues on manufacturing domestically and abroad, in addition to an inspiring message from IMA Board of Directors Chair, Greg Webb, of Archer Daniels Midland Company.

"I'm excited to honor CSL Behring as the 2023 Manufacturer of the Year in Illinois for their remarkable achievements in the field of biosciences. Their innovation and leadership in developing advanced treatments have saved the lives of countless people across the world," said Mark Denzler, President & CEO of the Illinois Manufacturers' Association. "Their unrelenting drive and commitment to producing groundbreaking treatments for patients makes them an important part of the global healthcare community, and we are proud to recognize them as the very best of Illinois' manufacturing sector."

The IMA's annual award recognizes a company for their leadership in six core areas:

- **Manufacturing Advocacy:** Serves as a strong voice for the manufacturing industry at the local, state, or national level.
- **Operational Excellence:** Creates a profound and lasting impact on stakeholders, companies, markets, and suppliers within the manufacturing sector with a strong entrepreneurial spirit.
- **Innovation & Technology:** Committed to innovation, Research & Development, transformative product development, or technological advances.
- **Workforce Development & Diversity:** Focused on building the next generation of leaders through support of education and

workforce development programs.

- **Community Engagement:** Demonstrates long-term commitment to local community, charitable, and philanthropic efforts.
- **Sustainability:** Supports sustainable methods of production and elimination of non-value-added activities from operations.

"Thank you for the tremendous honor of being named 2023 Manufacturer of the Year," said Abner Garcia-Delgado, VP of Manufacturing and Kankakee Site Head. "We are proud of the work we do to save



lives and this recognition reinforces the impact we have locally and for our patients around the world."

In addition, a new award introduced this year is the Janice M. Christiansen Leadership Award, presented posthumously to Christiansen, a longtime member of the IMA Board of Directors who was elected as the IMA's first female Board Chair in 2010. Christiansen was a trailblazer, mentor, and manufacturing icon popularly known as the "Flag Lady" for her legacy of work at long-time family-owned and operated flag and banner manufacturing company, Flag Source/J.C Schultz Enterprises. Her achievements included installing the largest embroidery machine in the world to make the star fields for U.S. flags and add-

ing direct-to-fabric digital printers for other items. Christiansen passed away in March from brain cancer and was beloved and respected by manufacturers across the state for her contributions to strengthening the manufacturing sector in Illinois.

Legacy awards were given to companies celebrating milestone anniversaries of service to our Association, and both company and individual champions were recognized in this year's Manufacturing Miles competition.

Along with our partner, BlueCross and BlueShield of Illinois, we also concluded this year's Manufacturing Miles competition, which was created to encourage healthy activities amongst the manufacturing community.

These IMA members were recognized for milestone anniversaries of membership:

130 years – Founding Members of the IMA – Members since 1893

Amsted Industries Inc
Brunswick Corp
Commonwealth Edison
Deere & Company
Henkel AG & Co. KGaA
Peoples Gas
Tablet & Ticket Co

100 years – Members since 1923

Arthur Harris & Company

75 years – Members since 1948

Taubensee Steel & Wire Company

50 years – Members since 1973

Lakeside Equipment Corporation
Solomon Colors, Inc.
Springfield Plastics, Inc.
True Value Manufacturing
Universal Chemicals & Coatings Inc.

25 years – Members since 1998

G & W Electric
General Converting, Inc.
Graymills Corporation
Metro East Industries, Inc.
Mid-State Tank Co., Inc.
Suncast Corporation
The Lakone Company
Walker Process Equipment / A Division of McNish Corporation
Whitney Medical Solutions ♦

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CHIEF OPERATING OFFICER: ONE OF THE MOST CRITICAL C-LEVEL POSITIONS IN PRIVATELY HELD COMPANIES

THE OVERTURE GROUP

What is a COO? The Chief Operating Officer (COO) is one of the most important C-Level positions and one of the most difficult positions to recruit for. Not all companies include this role. Still, many who don't are considering adding it for reasons outlined below. The role often includes comprehensive responsibilities and is sometimes misunderstood because of the dynamic range of skills it demands. In addition, the role can vary widely based on a company's unique needs, stage of development, team composition, and the strengths of the current executive team. As the second-in-command, reporting to the CEO, the COO is accountable for daily operations and administrative functions. In some cases, the COO may also assume the title of President/COO if they have external responsibilities.

When do companies typically add this position?

This position can be added for one or more of the following reasons:

- Increase the CEO's effectiveness by taking over the burden of day-to-day operational responsibilities
- Create cultural change the CEO cannot accomplish on their own
- Improve a company's ability to execute its business and strategic plans
- Improve a company's ability to increase efficiency and effectiveness between departments, divisions, or plants/locations
- Provide a successor to the CEO when the role is used as training or proving ground (however, not all COOs are hired for this reason nor will make good CEOs)

What are the skills required to be an exceptional COO? How have these changed in the last 10 years?

Below lists the core skill set that a COO should possess, regardless of the

company:

- Systems-oriented to be capable of optimizing processes to enhance organizational efficiency and effectiveness.
- Collaborative in nature to ensure effective management, garner support, and achieve positive outcomes through collective efforts.
- Familiar with conflict management techniques that help resolve organizational issues productively and constructively.
- Planful and forward-thinking to ensure people and departments are all synergistically working to achieve business goals and objectives.
- Financially oriented with strong business acumen
- Exceptional communications skills to effectively communicate at all company levels, whether that be to the board or shop floor
- Delegation skills to better leverage talents and to manage projects others will be leading

In the last ten years, the role is demanding a higher level of expertise in specific domains as follows:

- **Change Management** Otherwise referred to as interventions, change management includes business planning, organizational design, process improvement, compensation as a tool, training, development, and communications. While some of these skills have always been part of the role or skill set of the COO, the ability to orchestrate change and strategically use these interventions is true change management. With the pace of change rapidly accelerating, these skills are now critical.
- **Digital Transformation** Broadly speaking, digital transformation can be defined as a company's goal of leveraging technology to better serve its customers and to better manage the business internally. In the last 20 years, especially during

the previous five years, the use of technology has increased significantly. For companies to excel, they must leverage technology for external purposes, including dealing with customers and vendors. In addition, companies must optimize their use for internal purposes.

It's not uncommon for the COO to possess a broader skillset than the CEO, who may be exceptionally strong in a few areas and weaker in others. That in mind, a CEO must recognize their own strengths and weaknesses in order to build a complementary team.

Key Attributes:

- Analytical
- Systems-Thinker
- Collaborator
- Problem Solver
- Conflict Resolver
- Planner
- Communicator
- Integrator
- Coach & Mentor
- Financially Savvy
- Intellectually Curious

What are the different types of COOs?

There are different types of COOs with specific qualities making them attractive recruits based on a company's unique environment or needs:

- **Executor** - This COO has a heavy emphasis on the company executing its business operations and strategic plan.
- **Integrator** - Some organizations have high-conflict situations due to the nature of their business or other reasons. The COO must act as an integrator, ensuring cultural cohesion.
- **Change Agent** - This COO is heavily involved in bringing about change. This change can be technological, strategic (shifting to new

markets or rolling out new product lines), or cultural where they partner with the CEO.

- **Mentor/Coach** - This COO can be especially critical within a company that is developing staff and future leaders for growth or succession purposes. A seasoned and sometimes older COO can train and develop these individuals.

- **CEO Successor** - Not all COOs are brought in before replacing the current COO, but some are. In this case, the COO position is a transition role. In some situations,, the COO will progress to President/COO before becoming CEO.

What is the key to a successful CEO-COO relationship?

More so than any others , these positions need to be aligned, with the ability to work in harmony with one another. They do not need to have the same management style; in some respects, they should differ to ensure they have styles that create constructive interaction and complement one another so that “1 plus 1 equal 3.”

To ensure a successful work relationship, the following basics should be considered:

- Weekly or bi-weekly one-on-one meetings to ensure there is timely dialogue. These one-on-one meetings exclude other meetings like business planning, committee or task forces, and management meetings. This time should be considered sacred to ensure opportunities and issues are addressed promptly.
- A psychological/leadership assessment should be done on both executives. The assessment should be shared with both parties to understand the strengths and weaknesses of their respective styles and tendencies.
- Periodic roles reviews should be done annually to discuss potential adjustments to their roles based on

the evolving needs of the business. Some refer to this exercise as role negotiation and clarification.

When to promote from within or recruit from outside?

Before deciding to promote from within or recruit from the outside, the company must define the role and success criteria. The following items should be considered:

- Skills and attributes of the role
- Industry experience or desired previous roles
- Duties and responsibilities

- The strengths and weaknesses of the current executive team
- The company’s succession plans.

In addition, understanding a company’s strategic objectives for the future is a crucial step towards identifying the ideal candidate. Understand that the COO will be responsible for driving key initiatives and implementing strategies that align with the company’s long-term business plans. By gaining insight into the organization’s vision and goals, stakeholders can better evaluate the necessary skills, experience, and qualities required in a leader to ensure the company’s success and growth in the future. ♦

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CHATGPT: A GENIUS AT YOUR SERVICE

MILLER COOPER & CO, LTD

Many people are captivated by Artificial Intelligence (AI) advancements, particularly with OpenAI's ChatGPT, website <https://chat.openai.com/>. GPT, an acronym for "Generative Pretrained Transformer," is a model built on a vast amount of data. It understands and creates language in responding to specific queries, technically by predicting the next word in a sentence.

Launched as version 3.5 in November 2022 and swiftly followed by version 4.0 in March 2023, ChatGPT can make remarkable contributions, ranging from researching scientific problems to crafting poetry. The results are immediate, practical, and ready to use often with only minor modifications. ChatGPT can be used with search engines, such as Microsoft's Bing, and offer topical insights.

Chat with the Bot

The key to leveraging ChatGPT is prompting, a skill – indeed an art – rapidly gaining demand. It's best to start with an action verb, asking ChatGPT to write, describe, or explain, then include specific text or points to be addressed. For editing, users can prompt ChatGPT to suggest changes. They can also specify options rather than a single presentation. The good news is that you can directly follow up on ChatGPT's response if you want more. For example, you can ask to "shorten" a letter or "explain" an aspect in more detail.

However, sometimes ChatGPT's reactions sound surprisingly human. For instance, I once asked ChatGPT to add humor to a paragraph about accounting. Disappointed with the result, I reminded Chat to "make it funny." In response, ChatGPT argued: "I thought I was being funny. Humor is subjective, and what may seem funny to me may not seem funny to you. Maybe you can tell me what kind of humor you like, and I can try to adjust my style. Do you like sarcasm, irony, puns, satire, parody, or something else?"

You can also correct ChatGPT when it makes a mistake. It typically responds with an apology and acknowledges the correction. These efforts continually improve ChatGPT, making it "smarter." ChatGPT has already proven to have made tremendous progress. Per Ryan Hogg in the March 26, 2023, edition of Business Insider, "A professor says he's stunned that ChatGPT went from a D grade on his economics test to an A in just 3 months." As ChatGPT gets better, concerns about incorrect answers become less.

ChatGPT is mindful not to overstate its capabilities. For instance, when asked income tax questions, it provides helpful information but invariably advises users to consult a professional for personalized advice.

Expect Even More Soon

Initially, ChatGPT was limited to data before September 2021. The updated model includes information through April 2023, so it can answer with more current context. Future versions of ChatGPT could pull in real-time information from the web or other sources, allowing it to provide the most up-to-date information.

In the future, ChatGPT could become more personalized, learning from each user's preferences and style of communication to provide a more tailored experience. ChatGPT could better understand the context of a conversation to generate more accurate and relevant responses.

A paid professional "experimental" version is available. A new service, GPTs, enables users to create a custom chatbot that can automate responses to frequently asked questions, for instance. An artistic aspect is the ability to generate custom images, such as an engineer in a particular type of factory, using AI of Bing Create, website <https://www.bing.com/create>. Software developers use GitHub Copilot. Professionals can customize Microsoft 365 Copilot.

Newly added to ChatGPT are voice and image capabilities. Users can now use voice to engage in back-and-forth conversations and upload images. The next step would be for ChatGPT to understand and generate videos or other forms of media.

Expanded features in data analytics and even the verification of Excel spreadsheets are in process. In the meantime, as ChatGPT puts it, "I'm sorry for any confusion, but I'm a text-based AI and cannot directly upload or manipulate files, including Excel spreadsheets. However, I can assist you with questions or tasks related to Excel. If you have a specific question or need help with something related to an Excel spreadsheet, please describe the issue, and I'll provide guidance based on your description."

More broadly, AI technology could lead the next industrial revolution. The Fourth Industrial Revolution, also known as Industry 4.0, is characterized by a fusion of technologies blurring the lines between the physical, digital, and biological spheres. It involves growing and consolidating tech-

nologies such as AI, machine learning, deep learning, and the Internet of Things (IoT). It will impact various sectors significantly, including healthcare, banking, transportation, and more.

Recognize Concerns

Revolutionary AI like ChatGPT can elevate society by enhancing communication, knowledge dissemination, and problem-solving. ChatGPT draws on massive data in seconds to answer queries. Likewise, AI can take over routine and repetitive tasks and allow people to focus on complex problem-solving, strategic decision-making, and innovative thinking.

A question is, does the text generated belong to ChatGPT or the user? Is it necessary to quote ChatGPT? Chat GPT indicates that "The generated content is a result of the interaction between the user and the AI model. Therefore, the user has the right to use the generated content." However, as the writers' strike and class action lawsuit demonstrated, ChatGPT may compromise intellectual property rights. Authors claim that their models for fiction story-telling have been infringed.

As one can imagine, ChatGPT can be plagiarized in academia, where students may claim the bot's work as their own. Several software tools have been developed in response to detect AI-generated writing, including AI Writer Content Detector and others. A PC Magazine review is at: <https://www.pcmag.com/how-to/how-to-detect-chatgpt-written-text>.

Many people are also concerned about the ethical side, such as addressing biases, ensuring transparency, and safeguarding privacy. While ChatGPT has no beliefs or morals, some people fear it is developing a mind of its own over time. It is a tool that must be used responsibly. The key is for societies to stay ahead of the curve by educating, upgrading skills, and promoting flexibility while guiding proactively. That way, societies can turn AI from a challenge into an opportunity, unlocking new possibilities. Ultimately, AI can propel humanity to a whole new level.

I prompted ChatGPT to describe itself in the voice of Shakespeare: "Hark, thou seeker of knowledge, I am but a humble creation of the minds that weave the tapestry of code. A linguistic virtuoso, I dwell in the realm of electrons, ready to serve thee with words of wisdom and discourse of yore." ♦

NAVIGATING THE FUTURE: UNVEILING THE TECHNOLOGICAL LANDSCAPE OF ILLINOIS MANUFACTURING

ILLINOIS MANUFACTURING EXCELLENCE CENTER
DAVID BOULAY, PRESIDENT



Every time I step onto the production floor, I can't help but be awestruck. I witness countless examples of innovation and dedication that make Illinois manufacturing a powerhouse. It's a genuine thrill to experience firsthand the incredible impact we're making on the world through the diverse range of products made in Illinois.

These visits, rich conversations, and shared stories underscore a manufacturing renaissance. Our journey combines tried-and-true practices with cutting-edge automation and digital technologies, like artificial intelligence. Our success lies in seamlessly blending our rich traditions and multi-generational history as craftsmen into scenes that could easily be mistaken for a scene from a science fiction blockbuster.

The rise of advanced manufacturing technologies isn't just a leap forward; it's a promise to revolutionize our work processes. This transformation isn't solely about efficiency, though that's certainly a part of it. It's about making our operations more productive, safer, and even more fulfilling careers for our workforce. Amid this manufacturing evolution manufacturing leaders are the active participants shaping the future.

However, there's an undeniable contrast between the way large and small businesses embrace these transformative trends. Reports frequently highlight that larger companies are investing at a higher rate than smaller manufacturers in the adoption of cutting-edge innovations.

To understand this issue and the post-pandemic views of automation adoption, the Illinois Manufacturing Excellence Center (IMEC), the Illinois Manufacturers Association, and some of our key partners commissioned the W.E. Upjohn Institute to survey Illinois small and mid-sized manufacturers about their adoption of advanced manufacturing technologies and processes. The survey yielded several important insights:

1. Leveraging Advanced Manufacturing Technologies for Resilience in Turbulent Times: In the face of unprecedented challenges brought about by the pandemic, manufacturing leaders discovered a potent ally in advanced manufacturing technologies. Those who embraced higher levels of technology adoption and digitalization found themselves better equipped to navigate the storm, ensuring sustained productivity across their operations.

2. Navigating the Path to Technological Advancement in Illinois Manufacturing: While the potential of automation is recognized by two-thirds of manufacturers in Illinois, the journey towards technology adoption is still in its early stages. The state's manufacturers acknowledge the value but are making modest to minimal progress in embracing the transformative power of advanced technologies.

3. Bridging the Gap: Why Smaller Manufacturers Face Tech Adoption Challenges: The survey reinforced our studies that with respect to technology adoption, larger manufacturers are leading the charge, leaving their smaller counterparts behind. The discrepancy is attributed to differences in knowledge and skills, along with the compelling return on investment case that larger entities can make.

4. Digital Transformation: Empowering Small Manufacturers for Success: The tide is turning for smaller manufacturers as digital technologies emerge as the great equalizer. From ERP systems to data analytics and predictive maintenance, these tools not only offer stronger ROI cases but also present a golden opportunity for significant improvements in operations.

5. Workforce Dynamics: A Double-Edged Sword in Technology Adoption: Workforce challenges are both propelling and hindering the adoption of advanced manufacturing technologies. A significant percentage of manufacturers are turning to technology due to difficulties in finding qualified workers. However, the adoption itself introduces new challenges as it demands the development of skills to navigate these cutting-edge technologies.

6. Tailored Technology: A Strategic Imperative for Competitive Advantage: Advanced manufacturing technologies are far from a one-size-fits-all solution. In the pursuit of a competitive edge, manufacturers are strategically choosing technologies that align with their unique production processes, recognizing the importance of a tailored approach.

7. Strategic Sequencing: Prioritizing Process Before Technology: Manufacturing leaders are cognizant of the importance of a thoughtful approach. Before diving into hard technologies, they prioritize understanding and enhancing their processes through 'soft' technologies like lean manufacturing, laying the groundwork for successful technological integration.

8. Overcoming Financial Hurdles on the Path to Productivity Gains: The road to long-term productivity gains is hindered by short-term financial uncertainties for manufacturers. Both those investing and those hesitant to embrace advanced manufacturing technologies cite high financial investments as the primary obstacle, highlighting the need for strategic financial planning.

9. Learning the Ropes: Navigating the Landscape of Advanced Manufacturing Technologies: The journey towards technological adoption is accompanied by a learning curve. Lack of familiarity and understanding of technological capabilities emerges as a significant barrier. Survey respondents express their learning primarily through news articles, presentations, and individual research but often struggle with applying these insights to their specific business cases. There's much to learn, and finding the right path is crucial.

Illinois' small and mid-sized manufacturers serve as the linchpins of our supply chains and the cornerstones of our communities. With the manufacturing industry experiencing substantial changes driven by automation and shifts in supply chains, the manner in which these companies adopt and integrate technology will prove pivotal for their future success.

The survey's findings illuminate essential insights, providing a window into the distinctive challenges and opportunities confronting small and mid-sized manufacturers within this ever-evolving landscape. This report transcends mere data points, serving as a tool to construct roadmaps that empower leaders to make well-informed decisions and strategic maneuvers, positioning themselves for a competitive advantage. For in-depth coverage of the survey results and analysis, [read the full report](#) ♦

MEMBER NEWS



Koppers Announces Leadership Transition Plan

Koppers Inc., a wholly-owned subsidiary of Koppers Holdings Inc. (NYSE: KOP), today announced a transition plan that will occur throughout 2024 for key leadership roles. The plan will culminate in the retirement of James Healey, Vice President, Utility and Industrial Products (UIP), effective December 31, 2024, after a 40-year career with the company. Mr. Healey will serve as Special Assistant to the President and COO effective July 1, 2024, and remain actively involved in the UIP leadership transition for the remainder of the year.

Jason Bakk has been chosen to succeed Mr. Healey and will assume the role of Vice President, UIP, effective July 1, 2024. Mr. Bakk is currently Vice President, North American Carbon Materials and Chemicals (CMC), a position he has held since May 2020. In his new role, Mr. Bakk will be responsible for delivering on the aggressive growth plans developed during Mr. Healey's tenure as the head of UIP by further strengthening customer relationships, growing market share, optimizing production capabilities, and promoting safety and sustainability. Mr. Bakk has more than 24 years of chemical industry experience, the last 11 with Koppers after joining the company in November 2012.

Brett Johnston has been named to succeed Mr. Bakk as Vice President, North American CMC, effective July 1, 2024. Mr. Johnston is currently Commercial Director, North American CMC, where he draws upon his extensive sales and marketing experience to manage critical customer relationships. In his new role, Mr. Johnston will be responsible for all activities in North American CMC, including production, logistics, and commercial and financial performance. Additionally, Mr. Johnston will be responsible for evaluating ways to further streamline North American CMC by strengthening the supply chain and reducing costs through sharing best practices across the global CMC organization. Mr. Johnston joined Koppers in May 2012 and advanced in the CMC business through a series of management positions before moving into his role of leading the commercial organization in August 2022.



What is a workplace chaplain, and do you need one?

On July 27, HR Brew released an article on workplace chaplaincy (What is a workplace chaplain, and do you need one? (hr-brew.com) featuring Marketplace Chaplains with the subtitle "Workplace chaplain programs can bridge the gap between employees and HR teams". This title sums up well how our Employee Care Service extends and broadens the level of care and support we provide to employees, all on behalf of caring company leaders.

Marketplace Chaplains' customer Farmer Focus has enabled Chief People Officer Liz Fuchs and her company to focus on "serving the whole person and not just the person that shows up to work." Liz said "There are six poultry operations within a 20-minute drive of where we are, so people have to want to be here. There's other options for them...so how do we differentiate ourselves? The way that we really strive to do that is taking the care of our people to the next level."



The Fabricator honors Ludlow Manufacturing with the 2024 Industry Award

The Fabricator magazine has named Ludlow Manufacturing, Waukegan, Ill., as the winner of its 2024 Industry Award.

Founded in 2005, Ludlow Manufacturing has grown its business more than 100% since 2019 while maintaining quality levels and a very high on-time delivery rate. The company has invested heavily in automation, robotics, and new metal fabricating technology, including a 20-kW laser cutting machine, over the same four-year period. Ludlow Manufacturing also received the FMA Safety Award of Honor in 2023 for avoiding any lost time due to a work-related accident or illness in the previous two years.

"Ludlow Manufacturing has been making quality parts and on-time deliveries for years, but it really hit its stride in recent years as it got serious about documenting processes and trying to tame the chaos associated with job shop work. As people got more engaged in following these newly instilled processes, they started seeing results in the form of fewer surprises and more

adherence to schedules," said Dan Davis, editor-in-chief of The Fabricator. "It's an exciting transformational story that every manufacturing company should find interesting. We are very excited to honor Ludlow Manufacturing for their efforts."

The Fabricator's Industry Award is given to a company in the metal forming and fabricating industry that has successfully improved operations, attained business growth, and contributed to both the local and industrial communities.

Representatives from Ludlow Manufacturing will be honored at the Fabricators and Manufacturers Association's Annual Meeting in Clearwater Beach, Fla., on Feb. 27. The company will appear in a cover story in the February 2024 edition of The Fabricator.



Good food. Responsibly.®

Smithfield Foods Distributes More Than 7,000 Free Holiday Hams in St. Charles, Illinois

SMITHFIELD, Va., Dec. 22, 2023 / PRNewswire/ -- Smithfield Foods distributed 7,300 free Smithfield Spiral Quarter Hams to brighten the holidays for individuals and families in the St. Charles, Illinois, area.

"The holiday season is a time of giving, so this was the perfect time for Smithfield to give back to our local community," said Ashton Williams, plant manager of Smithfield's St. Charles food-processing facility. "On behalf of our 2,000 employees in Illinois, we are honored to have the opportunity to share the spirit of the season with our neighbors in St. Charles."

Smithfield volunteers distributed more than 6,200 Smithfield Spiral Quarter Hams on a first-come, first-served basis at the event, which was held at Smithfield's St. Charles facility on Dec. 21. The remainder were donated to the St. Charles Fire Department, the St. Charles Police Department, Dekalb Fire and Rescue and Lazarus House, a homeless shelter in St. Charles, for distribution over the weekend.

Since 2008, Smithfield's signature hunger relief program, Helping Hungry Homes®, has provided hundreds of millions of servings of protein all 50 U.S. states, as well as in Poland, Romania and Mexico. In 2022, Smithfield donated nearly 25 million servings of protein to food banks, disaster relief efforts and community outreach programs across the U.S. ♦



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ADDRESS	CITY	SF	CLEAR HEIGHT	# DOCKS	DATE AVAILABLE	LEASING AGENT
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LAKE COUNTY						
2000 USG Drive	Libertyville	242,200	28'	16	Immediate	CBRE - Sam Badger
13820 W. Business Center Dr	Green Oaks	101,172	28'	11	Immediate	CBRE - Sam Badger
Amhurst Lake Business Park	Waukegan	15,608 – 74,834	Varies	Varies	Immediate	Colliers - Pat Hake
I-88 CORRIDOR						
1880 Country Farm Dr	Naperville	162,000	24'	11	Immediate	CBRE - David Prell
RACINE						
901 Renaissance Blvd	Sturtevant	551,759	32'	57	Immediate	CW - Jeff Hoffman
KENOSHA						
7809 100th St	Pleasant Prairie	144,281	26'	10	Immediate	Colliers - Pat Hake
8505 100th St	Pleasant Prairie	256,239	28'	13	Immediate	CBRE - Sam Badger

Contact

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BALES METAL SURFACE SOLUTIONS
Downers Grove, IL

BLUSKY RESTORATION
Morton, IL

BUDNICK CONVERTING INC
Columbia, IL

CLIFTON LARSON ALLEN PEORIA
Peoria, IL

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HEARTLAND HARVEST, INC.
Kankakee, IL

ILLINOIS TRUCKING ASSOCIATION
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NESTLE BEVERAGE
Chicago, IL

O'SHEA BUILDERS
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