



LEARNERS LIVE



Expanded from Bill Attardi's EnergyWatch.com

January 2025

<http://attardimarketing.com/>

<http://learnerslive.com/>



[AULD LANG SYNE by Sissel - YouTube \(youtube-nocookie.com\)](https://www.youtube.com/watch?v=nocookie.com)

Something to Think About... Launch of LearnersLive.com in 2025 - A Passion for Learning by Bill Attardi

Live as if you were to die tomorrow.

Learn as if you were to live forever.

Mahatma Gandhi

In every environment, in every company, in every department, in every office, in every classroom, on every team, there are inequities. Men and women come in all sizes, all levels of acumen, all degrees of competency and talent. In management, many times, not of your choosing, you get a diversity of high achievers, good performers, weak contributors, and those that do not contribute a dime to the performance of the team. I call them *the deadbeats!*

College students are there to learn, to prepare for a life of success in a leadership role with an organization of their instigation or rather, maybe one of their choosing, and that may happen a few times. In my undergraduate classes, especially when they are mostly seniors, and certainly in my graduate classes at Monmouth University, I congratulate them for the progress they have made so far in their collegiate work and no matter the future, each and every one of them has earned the right to be called *highly competent individual*.....as long as they nourish the learning process. But I explain, that's only the start of a successful career, do they have the talent and dedication to learning, all the time, to move on...

Learners possess certain attributes that distinguish them from the Learned. They anticipate rather than react to change. Some call that vision. They become essential facilitators of change within their altered environment. They can skillfully communicate the new and technically esoteric with a clarity that leads to understanding and advocacy. Organizations that don't value learning and the change that springs from learning will struggle to stay relevant in this fast-paced ever-changing marketplace.

*The world is changing rapidly. For the timid, change is frightening; for the comfortable, change is threatening; for the confident, change is opportunity.....
and confidence comes from competency.*

Nido Qubein, President of High Point University

There's that word *competency* again. That's why most individuals even go to college, to develop their competency. Learners are just highly competent individuals that influence change in an organization and, in turn, as leaders, allow others to adapt to that change. As an Educator, my ambition here is to express my view that education, the learning process, is not a one-time event but rather, something you do right all the time. Sounds a lot like Vince Lombardi when he talked about doing things right, not once in a while but all the time.....remember that? I believe learning is something you do all the time!

Launch of LearnersLive.com in 2025

I have a passion for teaching, for learning.....been doing it most of my life and for the past 20+ years at Monmouth University. Want to continue doing it as long as God allows.

Here's the plan:

- **LearnersLive Objective: to learn something you do not know; to confirm what you already know!**
- **To post something for you to learn, every single day...a continuing learning experience.**
- **Focus will be on topics of learning.....I have a dozen courses we can add to the curriculum right away.....all virtual.....from 5 minute to 30 minute sessions.**
- **Marketing & management sessions I teach at Monmouth University....**
- **Will invite other educators.....already talked to Jim Benya, Deb Burnett, Mark Rea, Chris Brown, Bernie Erickson, others**
- **Interviews with industry leaders...**
- **Also access to industry training websites and videos**
- **DISC assessments**

Will keep some of EnergyWatch.....2025 will be a celebration for your humble correspondent: 60 years in the lighting business. Whoooooah! Will continue to post:

- **The monthly blog**
- **The monthly newsletter summary**
- **Industry news and new product information but only if you learn something**
- **Published articles that focus on teaching something**
- **Industry research.....including other training courses offered by the industry**

What do you think? Need your help with any suggestions you may have to make this effort meaningful as an ongoing contributor to your personal learning activities.

Did you know...

The Three Key Characteristics That Make Elon Musk Who He Is - “When something is important enough, you do it even if the odds are not in your favor.” Elon Musk

1. **Hard work and impeccable work ethics.**
2. **Tolerance for high stakes.**
3. **Ongoing willingness to learn.** (very apropos for the new website)

It’s often said that those who stop learning stop living. One of the critical characteristics of Elon Musk is that he’s an avid learner. Not many know that Musk actually is self-taught in programming. And not *just* programming; he’s learned many advanced level subjects on his own. He reads books and every bit of material he can get his hands on to quench his never-ending thirst for knowledge. The result? He’s a leading authority in many diverse concepts. This is something of immense importance. You must never stop seeking answers. You should never be satisfied. Musk’s relentless pursuit of knowledge is what enabled him to venture into so many fields and become a force to reckon with in all of them. [The 3 Traits That Make Elon Musk Successful](#)



National News

1. ***Federal Government Now Requires Energy Efficient Outdoor Lighting Products at Thousands of Government Sites and Facilities*** - The federal government is the nation’s largest property owner, maintaining a portfolio of nearly 9,600 buildings that span over 375 million square feet. It’s the nation’s largest energy consumer, as well. The GSA’s [2024 P100 Facilities Standards for the Public Buildings Service](#) — a key document guiding building design and the purchase of products for federal and other public entities — now points project actors to the DLC’s [LUNA Technical Requirements and Qualified Projects List](#) for certain types of outdoor lighting at public facilities. Specifiers, designers and installers wishing to identify outdoor lighting products for use in federal and other public buildings can find and compare LUNA-listed luminaires by creating a free [myDLC](#) account and then searching the [LUNA QPL](#). [Federal Government Now Requires Energy Efficient Outdoor Lighting Products that Reduce Light Pollution at Thousands of Government Sites and Facilities | EC&M](#)
2. ***Meta to Build \$10B AI Data Center, Musk Expands AI Facility*** - The largest artificial intelligence data center ever built by Facebook’s parent company Meta is coming to northeast Louisiana, the company said Wednesday, bringing hopes that the \$10 billion facility will transform an economically neglected corner of the state. Meanwhile, Elon Musk’s AI startup, xAI, is expanding its existing supercomputer project in Memphis, Tennessee, the city’s chamber of commerce said Wednesday. The chamber also said that Nvidia, Dell, and Supermicro Computer will be “establishing operations in Memphis,” without offering further details. The U.S. Commerce Department found that there aren’t enough data centers in the U.S. to meet the rising AI-fueled demand, which is projected to grow by 9% each year through 2030, citing industry reports. [Meta to Build \\$10B AI Data Center, Musk Expands AI Facility – tEDmag](#)

3. **Registration Now Open for LEDucation 2025** - LEDucation, a premier annual event for the North American lighting industry, is excited to announce that registration is now open for its 2025 Trade Show and Conference being held at the New York Hilton Midtown, March 18–



19, 2025. New and returning exhibitors, industry influencers, and a myriad of engaging, educational experiences will help all attendees gain an advantage in the lighting business. With over [400 exhibitors](#) gathered across four expansive Trade Show halls, attendees will be able to explore the latest advancements in lighting products and technologies that are shaping a

brighter, more efficient future for our industry. For more information on these sessions including complete presenter bios, visit leducation.org/2025-presentations. Attendees can view registrations details and find a link to register at leducation.org/registration

4. **DALI, TALQ and Zhaga Announce Collaboration to Unify Data Streams for Smart Street Lighting Solutions** - The DALI Alliance (DALI), the TALQ Consortium (TALQ), and the Zhaga Consortium (Zhaga)—each focused on defining international lighting standards to ease investment decisions for public and private entities—recently announced the signing of a liaison agreement to collaborate on unifying data streams for smart street lighting systems. The collaboration aims to provide a better choice of solutions with interoperable components and enhance communication across outdoor lighting systems. [Lighting Controls Association – The Lighting Controls Authority](#)
5. **Delta Achieves 57 Percent Lighting Energy Reduction at LEED Zero Energy HQ** - Delta Electronics announced its LEED Zero Energy-certified Americas headquarters green building in Fremont, California, is expected to achieve a significant 57 percent reduction in annual lighting electricity consumption. This accomplishment is attributed to the recent integration of a total solution featuring systems from three Delta Group companies: cutting-edge Carisma LED lighting systems from Amerlux, smart building management software from LOYTEC and Delta Controls, along with Bluetooth low-energy drivers and multi-sensors. [Delta Electronics Achieves 57 Percent Lighting Energy Reduction at LEED Zero Energy HQ - Facility Management Energy Efficiency Quick Read](#)
6. **Brand Closing Announcement from LEDs Magazine** - LEDs Magazine will close out its website and editorial newsletters in December, with some content archiving on the BUILDINGS.com website. After two decades of serving professionals in the LED and lighting markets, *LEDs Magazine* will cease publication on December 16, 2024. While *LEDs Magazine* will conclude its business this December, Endeavor Business Media (EBM) maintains a diverse portfolio of business-to-business brands. We encourage you to explore three other EBM brands that track developments in the lighting & control market. [Architectural Products](#) The product publication of U.S.-based architecture professionals [BUILDINGS](#) Helping building owners and facilities managers make smarter product, technology, and operations strategy decisions. [EC&M Electrical Construction & Maintenance \(EC&M\)](#) targeting electrical professionals. [Brand Closing Announcement from LEDs Magazine | LEDs Magazine](#)

Global News

7. *The LED Spectrum That's Designed for Vertical Farming*

Vertical farming is transforming the landscape of agriculture, making it more sustainable, efficient, and scalable. Central to this transformation is the technology that supports plant growth, with lighting playing a pivotal role. Cultivators are in search of LED grow lights that can deliver higher yields and improved crop quality. In response to this demand, Valoya of Finland has introduced the Lumi-VF spectrum, an LED lighting solution designed specifically for vertical farming. The Lumi-VF spectrum is an outcome of careful design, optimized to enhance yield, improve plant quality, and enable more efficient energy use in vertical farming LED lights. Valoya's products are equipped with LEDs that offer a broad and continuous spectrum, closely resembling natural sunlight. [The LED spectrum that's designed for vertical farming - LEDinside](#)



8. *Electric Toyota Bz3c SUV Will Have 630km Range and Lidar Powered Self-Driving*



The Toyota bZ3C will launch in early 2025 and will have a range of up to 630 km. It's claimed that the Midsize SUV will be FAW Toyota's most intelligent car to date, with noteworthy intelligent driving and an intelligent cockpit. Dominating the dashboard is a 15.6-inch infotainment screen, which apparently supports more than 200 third-party apps. It's claimed to have the first driver and occupant monitoring system in its class. This includes AI face recognition, in-car video calls, reminders about children, and features such as gesture and voice control, along with an AI

virtual assistant. The steering wheel itself appears to have a large number of buttons on it. There is a Lidar unit on top of the windshield, and the car is set to feature high-end smart driving ability. The car should be able to undertake urban smart driving along with high-speed and parking functions. [Electric Toyota bZ3C SUV will have 630km range and lidar powered self-driving - LEDinside](#)

9. *The New Peugeot 3008 and 5008 Feature Pixel LED Smart Lighting Technology*



The arrival of new PEUGEOT 3008 y 5008 GT not only marks a step forward in design, but introduces a technological revolution with the incorporation of the Pixel LED Headlights, these SUVs already stood out for their distinctive design and electrified technologies and now they also offer safety and visual comfort in all driving conditions. Standard in the finish GT, the Pixel LED headlights offer you the best on the market in terms of visibility, this system ensures a optimal light beam that does not dazzle drivers of other vehicles by automatically adapting, while providing a distinctive appearance thanks to its feline look formed by the three claws

PEUGEOT features. [The new Peugeot 3008 and 5008 feature Pixel LED smart lighting technology - LEDinside](#)

E-Learning Showcase

10. Effective Sales Presentation Skills by Bill Attardi - Here are all three recorded sessions:

[Effective Sales Presentation Skills by Bill Attardi – YouTube](#) – 1st session May 2

[Bill Attardi’s Effective Sales Presentations #2](#) – 2nd session May 9

[Effective Sales Presentations with Bill Attardi, #3 – YouTube](#) – 3rd session May 16

In this first session, Bill focused on the crucial topic of **Preparation Strategy – The Will to Prepare to Win**. The second session focused on the topic of **Presentation Strategy**. The final session covered the topic of **Organizing the Presentation, Techniques in Presenting, and Personal Delivery**. These sessions are a great opportunity to learn the most effective way to improve your oral communications skills.

11. *Times, they are a changin!* Lots of changes.....No intention to get political but 2024 was an election year after all and this is really well said by Frank Bruni a NY Times reporter no less: YouTube video... <https://youtu.be/awHeQikZdgo> No question, people are now changing the way they get their information. So we at EnergyWatch are changing too: Starting in 2025, we are now LearnersLive.com. Learning is an ongoing activity and we want to contribute. We value learning and the change that springs from learning. Big change in our government is the Department of Government Efficiency (DOGE).....bears watching and we will.

12. Lumaris Tunable LED Tape Light by Lutron - Introducing the Lumaris Tunable White Tape Light solution, the first ever tape light designed to be part of a Lutron connected



lighting control system. Lumaris tape light is the essential solution for bringing a natural light experience into virtually any low-profile indoor application. This 2-channel LED tape solution is available in two popular color temperature ranges: 1800 K – 3000 K (soft white) or 2500 K – 5000 K (daylight) [Lumaris Tunable White Tape Light Spec Submittal \(3691304\)](#) Achieve high-quality tunable white lighting with Lutron’s new Lumaris tape light.

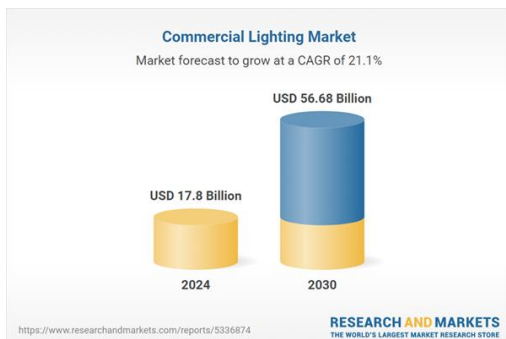
Professional-grade and purpose-built for RadioRA 3, the Lumaris solution requires just 3 simple components to install and removes the need for a separate driver. Available now. Watch the video to learn more. https://www.youtube.com/watch?v=0h7sTzP7T_E&t=1s

13. Tiger Party’s First Asian LED Project Is ‘Landmark Installation’ - A video art installation comprising 254 square metres of 2.9mm pixel pitch LED has been unveiled near the Taipei 101 skyscraper in Taiwan. Taipei Lumitree features a 360° LED tree and a 10m-high LED wall. The walls have a transparency rate of more than 75%. The installation is the first signage project in Asia from New York-based DOOH consultancy Tiger Party, and has been constructed in partnership with Kaiyue Construction. For the launch of Taipei Lumitree, Tiger Party has teamed up with global artistic community HUG to showcase the work of 12 artists. Tiger Party manages some of the most famous billboard in Times Square and oversees the ball drop every New Year's Eve. YouTube video:

<https://www.youtube.com/watch?v=5VvakF-YKqE>

Education Resources

- 14. TRAINING: *University of Colorado Boulder – Professional Lighting Education*** - The University of Colorado Boulder is pleased to announce that registration is now open for the 2025 Rocky Mountain Lighting Academy (RMLA) Short Course. This four-day course will be held on the beautiful CU campus in Boulder from May 29 through June 1, 2025. General sessions cover lighting and design fundamentals along with the latest developments in technology, color, and health. Technical Track students dive deeper into photometry, optics, and luminaire design while Design Track students gain practical experience with the early stages of the design process, including developing design concepts and goals. The course emphasizes hands-on learning experiences, and the class size is limited to ensure a fun, interactive experience. Further details and registration information can be found [on the program's website](#). For more information, please contact Bob Davis, Scholar in Residence and Director of Professional Lighting Education, davisrg@colorado.edu
- 15. TRAINING: *How to Design a Lighting Control System by C. Webster Marsh, CLCP and Craig DiLouie, LC, CLCP*** - Based on EE105: Lighting Control System Design, a new course in the Lighting Controls Association's Education Express program provides detailed information about designing an effective lighting control solution. In Part 1 of this Lighting Controls System Design series, we learned about key documentation including the Content Intent Narrative (CIN), Sequence of Operations (SOO), and Owner Project Requirements (OPR). The next step in design development in Part 2, is to turn these requirements and conceptual design into a realized design. In Part 3 of this series on how to design a lighting control system, we will discuss installation and post-occupancy. You will learn about bidding, responding to questions from installers, reviewing submittals and defending your design, following-through with the installation of the equipment, functional testing, training essential staff, and ultimately ensuring the owner is satisfied. [How to Design a Lighting Control System](#)
- 16. RESEARCH: *Commercial Lighting Market to Reach \$56 Billion by 2030*** - Research and Markets has published a new analysis, *Commercial Lighting Market.....Forecast 2025-2030*. The 187-page document covers key factors driving the growth of the commercial lighting market sector (including fixtures for hospitality, retail, workspaces, and more applications), which reached over \$17 billion in 2024 and is expected to grow at a CAGR of more than 20% in the coming years. The analysis forecasts that the market will reach over \$56 billion by 2030 due to increased sustainability efforts, including a focus on human-centric adaptive lighting, adoption of smart lighting and retrofitting infrastructure, as well as the acceleration of urbanization. The analysis provides information on market restraints, such as the maintenance of fixtures, as well as market opportunities, such as solar lighting solutions, in addition to the PESTLE (political, economic, social, technological, legal and environmental) factors that influence market data. To find the full report, visit [Commercial Lighting Market by Offering, Installation Type, Communication Technology, End-use Application, End-User - Global Forecast 2025-2030](#)



Publications of Learning

- 17. *The Great Reshoring: Wake Up, America, Your Factory Floor Is Calling* by Alexander De Ridder** - The real AI revolution isn't happening in Silicon Valley conference rooms — it's about to explode on America's factory floors. This isn't your standard automation upgrade. AI-powered manufacturing is like giving every worker a superpower. Suddenly your maintenance tech isn't just fixing machines — it's preventing breakdowns before they happen. Your quality control is catching defects that human eyes can't even see. Your production planning is adjusting to market changes in real time. But here's the best part: AI turns your biggest cost center—labor—into your greatest asset. Instead of replacing workers, AI elevates them. It handles the mind-numbing routine tasks while your people focus on what humans do best: innovating, problem-solving, and making the kind of judgment calls no algorithm can match. This approach not only creates new jobs but also transforms existing roles into hybrid positions that synergize human and AI capabilities. [The great reshoring: Wake up, America, your factory floor is calling](#)
- 18. *Driving Decisions with Data: A.I. Models Increase Project Resource Efficiency* by Jim Romeo** - A.I. is a hot topic and is making huge inroads into industrial sectors. Across every sector, there's an all-out sprint to harness A.I.'s power to build efficient business practices. The construction industry is no exception, and helpful data such as weather conditions, material costs, usage, labor expenditures, schedule data, change order data and more can be collected. A.I. is used in estimating software and other data science applications in construction in a way that is boosting the bottom line of projects that have been somewhat unpredictable. A.I. can be used to help preserve resources, make better estimates and produce more fruitful project results. A.I. is everywhere, improving estimating, budgeting and planning. There's more to come as A.I. applications are refined and larger data models are used. [Driving Decisions With Data: A.I. models increase project resource efficiency - Electrical Contractor Magazine \(ecmag.com\)](#)
- 19. *AI Like ChatGPT Is an Inevitable Part of Construction's Future* by Dr Graham Kelly** - Construction today is more open to innovation than ever before, allowing us to assess, analyse and improve many different aspects of the construction process. When it comes to asking the question, what does the digital future of the construction industry look like, who better to ask than **ChatGPT!** Ask just about anyone today, what is the biggest topic in construction tech right now and the answer will be **artificial intelligence (AI)**. AI in construction has the potential to help organisations realise value throughout the whole project lifecycles, including design, procurement, construction and operations. It can also help to overcome challenges is safety, costs, scheduling, maintenance and so much more. Here are some key trends and aspects shaping the digital future of the construction industry: [Don't fear the future: AI, BIM and a tech-led construction industry \(pbctoday.co.uk\)](#)
1. **Building Information Modelling (BIM)**
 2. **The Internet of Things (IoT)**
 3. **Augmented reality (AR) and virtual reality (VR)**
 4. **Drones**
 5. **3D printing**

- 20. *Harnessing AI to Empower Electrical Contractors by Sal Paraltore*** - The electrical contracting industry is no stranger to innovation. AI is set to transform the tools of the trade, enabling smarter, safer, and more efficient work. One of the core tasks for an electrician/technician is measurement — voltage, current, resistance, and beyond. Historically, these measurements have relied on the precision of the tools in hand and the expertise of the technician using them. But what happens when AI is introduced into this equation? AI, coupled with machine learning (ML), allows for the analysis of vast datasets at speeds and accuracies far beyond human capability. By recognizing patterns in data that might be invisible to the human eye, AI can enhance the precision of measurements and reveal insights that were previously unattainable. Moreover, AI can integrate data from multiple modalities to provide a more comprehensive understanding of a system’s health. Imagine a tool that not only measures but also analyzes and predicts potential issues, offering recommendations on the spot. This isn’t science fiction; it’s the future of electrical work. [Harnessing AI to Empower Electrical Contractors | EC&M](#)
- 21. *AI Will Force a Transformation of Tech Infrastructure by Steven Rosenbush*** - Cloud services and private networks for years had to handle relatively limited amounts of data. Now that artificial intelligence and deep learning are driving vast quantities of photos, video, sound and natural language into the mix, however, data that was once counted in gigabytes and terabytes is measured in much larger units of petabytes and exabytes. Information systems, including the cloud, must expand to store all of that data. Less obvious—and more interesting—is the need to access all of that information at much higher speed and, critically, lower operating cost. [AI Will Force a Transformation of Tech Infrastructure - WSJ](#)
- 22. *Cost of Electricity Expected to Skyrocket Due to Data Center Demand by Greg Zimmerman*** - The explosion of artificial intelligence, cryptocurrency mining, and other computing-intensive processes have fueled a building boom for data centers. But they’ve also fueled a massive spike in energy demand, which is in turn leading to higher energy prices for many facilities across the country. [One study estimates](#) data centers could be responsible for a 70 percent increase in the cost of electricity over the next 10 years. One hyperscale data center, as a point of reference, can use as much electricity as 40,000 homes. [Cost of Electricity Expected to Skyrocket Due to Data Center Demand - Facility Management Data Centers Quick Read](#)
- 23. *Electrical Wholesaling’s 2025 Market Planning Guide by Jim Lucy*** - The electrical industry is tracking for slow growth in 2025 after a steady but not spectacular year in 2024. *Electrical Marketing’s* updated estimated electrical sales potential data pegs sales growth at +2% nationally and \$150.4 billion in total electrical sales (not adjusted for inflation). *Electrical Wholesaling’s* +2% growth estimate is admittedly rather pedestrian given the current health of the U.S. economy and the perception that the new Administration’s pro-business stance will be good for the electrical wholesaling industry. EW’s editors believe there’s more upside in sales potential than downside risk and that electrical sales in 2025 could easily grow at a much faster rate. *EW* survey respondents were almost universally bullish on the impact of the Presidential election results. [2025 Market Planning Guide | Electrical Wholesaling](#)

24. *The Lagging Transition to LEDs in Schools – Part 2 of 3 by Jessica Kelly, Andrea Wilkerson, Dan Blitzer* - This article series looks at the current situation from the perspective of school facility personnel. Part 1 covered the transition to LED technology: [The Lagging Transition to LEDs in Schools – Part 1 of 3 by Jessica Kelly, Andrea Wilkerson, Dan Blitzer](#) Part 2 identifies the interrelated factors likely to affect adoption of LED systems in place of outdated fluorescents in school across the country Part 3 in the series will consider upgrade options available to school decision-makers but with tough decisions and trade-offs that consider both short- and long-term outcomes. State legislative actions to eliminate linear fluorescent lamps (outright or effectively) are increasing (see **Chart**). So far, 10 states have laws on the books or under consideration. Vermont has already prohibited all linear lamps, and, in January 2025, lamps cannot be sold in four more states (California, Colorado, Oregon, and Rhode Island). In November 2023, 140 countries agreed to prohibit the manufacture and import of linear fluorescent lamps, also due to mercury content. If fluorescent lamp sales continue to decline at an estimated rate of 20% annually over the next five years, the market will have fallen by another 67%, leaving sales at just 10% of the pre-LED rate. For schools needing a reliable and economical supply of replacement lamps, this looks like the effective end to fluorescent lighting in the United States. [The Lagging Transition to LEDs in Schools – Part 2 of 3 | EC&M](#)

25. *TCL Hosts Global Technology Innovation Conference, Showcasing Latest AI and Display Innovations* - The TCL Global Technology Innovation Conference, now in its 11th year since its inception in 2004, marked a significant shift from its previous internal forum to an open forum welcoming industry professionals. The conference served as a platform for scholars, top experts, industry leaders and partners to explore future industrial development. On December 11, the 2024 TCL Global Technology Innovation Conference (TIC) was held in Shenzhen. With the theme "The Future is Visible by AI", the conference focused on AI applications, smart devices, displays, new energy photovoltaics. During the event, TCL unveiled 16 technological breakthroughs, including 5 all-scenario AI applications. [\[News\] TCL Hosts Global Technology Innovation Conference, Showcasing Latest AI and Display Innovations - LEDinside](#)

26. *DLC Draft 1 Horticultural Technical Requirements V4.0* - The DesignLights Consortium (DLC) has released their Draft 1 Horticultural Technical Requirements V4.0. The draft proposes three updates:

- **Efficacy increase:** Hort V4.0 proposes to increase the efficacy threshold to $2.5 \mu\text{mol} \times \text{J}^{-1}$, which is an 8.7% increase over the Hort V3.0 threshold. This will set the DLC efficacy threshold for LED-based horticultural lighting at more than 45% above the most efficacious non-LED option.
- **Removal of lamp categories:** Hort V4.0 proposes to remove eligibility for lamps. This decision was made based on low application numbers in lamp categories.
- **Clarifications to various requirements:** A variety of clarifications are proposed throughout Hort V4.0, including for definitions of key terminology and for certain testing requirements.

The Draft 1 Horticultural Technical Requirements V4.0 document is available [here](#).

[LightNOW: News and Opinion for the Lighting Industry](#)



New Technologies

27. Temporary Work Light - Pro Series by SATCO / NUVO - Elevate your job-site lighting with



SATCO|NUVO's PRO Series Temporary Work Lights. Designed to endure tough conditions, these durable yet lightweight lamps are perfect for both indoor and outdoor use. Choose from three models: 60W with 6,000 lumens, 100W with 10,000 lumens, or 150W with 15,000 lumens, to meet your specific lighting needs. Constructed for rapid heat dissipation, each lamp also features a 15-foot quick-connect power cord for easy setup. The spring-loaded folding handle allows for effortless installation and maneuverability. Delivering 360-degree illumination, these lamps include integrated 4kV surge protection and IP65 rated connectors,

enabling multiple units to link together seamlessly to illuminate expansive workspaces.

[Download the Temporary Work Light Pro Series Information Sheet](#)

[SATCO/NUVO > New Products](#)

28. naturaLED® Wall Sconces: Up Down Light 3-Way with Photocell - naturaLED® Wall

Sconce comes in 20-watt, 36watt, up/down or up-and-down (3-way) selections with



selectable color temperatures. Energy-efficient and lasts up to 50,000+ hours on average life. Our wall sconce lights are an ideal lighting solution for security lights, both residential, commercial, and many other outdoor applications. Photocell included with easy ON/OFF Switch 18/36W 10/20W.

[DWS_wallsconce_7531_7532_7644_7645](#) Check out how

versatile and simple the outdoor wall sconces from naturaLED operates. The light direction can be directed up, down or both and the color temperature is selectable from warm to cool tones.

[Wall Sconces: Up Down Light 3-Way – naturaLED](#) Learn more by Frank Grobmeier on YouTube at [How Outdoor Wall Sconces Operate](#)

29. RAB Lighting's Hazardous Location Luminaire - Engineered for harsh-environment

applications, the HAZPAN can withstand use in the presence of flammable vapor, gases, and



ignitable dust/fibers. They're built for use in marine and hose-down environments, and ideal for manufacturing plants, chemical facilities, loading docks, and paper mills. The HAZPAN is offered in 1x4, 2x4, and 2x2 models, each available in two wattages and a bright 5000K for maximized visibility. Battery backup is available

for all three sizes. The HAZPAN comes standard with both suspension chains and ceiling mount brackets out of the box, with aircraft cable tethers included for additional support. A mounting kit is also available for recessed use in a ceiling or grid. Available as a separate accessory, the HAZMVS is a microwave sensor engineered for hazardous location use.

[HAZPAN Hazardous Low Bay - RAB Lighting](#)

LearnersLive Special Feature

Mind the AI Intuition Gap by Mitchell H Burman - The quality of your hunches will determine whether AI is your friend or foe.

Since Chat-GPT was released in late 2022, many of us have been fixated on how AI will impact our futures. But the more important question is how will each of us adapt to AI? We and our organizations will be tempted to embrace AI-powered systems to make important decisions and complete tasks as easily as possible. This could potentially put the unique skills and talents that make us valuable in jeopardy. But ignore AI, and we risk falling behind a rapidly changing world.

Figuring out how to thread this needle will be a constant challenge, with no easy or permanent answer. But intuition — that ineffable supplement to critical thinking that lets us synthesize everything we've experienced and learned during our lives without even trying — will be a reliable indicator of our success. If our hunches are still leading us in the right direction in business and in our personal lives, we'll have an advantage over those who simply rely on AI's recommendations. And we'll be far better positioned to use AI to extend our advantages. We'll know what questions to ask these systems, and how to judge the answers.

These advantages will be greatest when it matters most: during times of significant change or disruption. The smartest AI systems struggle to make sense of unprecedented patterns or events, until there's sufficient data and time for them to be trained.

We experienced such a disruption when COVID brought global supply chains to a standstill in early 2020. At the time, [only 2%](#) of companies were prepared to respond to this emergency. Factory workers sheltering in place and ports backing up certainly initiated the crisis. But companies were also over-reliant on automated logistics systems that had no idea what to do. For decades, these systems had been designed to strive for reduced channel stocks. AI algorithms designed to meet this objective were [irrelevant or worse](#) when it came to making sure every city and town had enough toilet paper.

Companies depended on their employee's hard-earned intuition to find their way forward. Operations experts at companies like Nike and Walmart ramped up digital channels to compensate for lost brick-and-mortar sales. College faculties pivoted to remote learning. Restaurant managers expanded take-out menus, and reassigned waiters to deliver orders. Pharmaceutical executives and Army logistics leaders, among others in the U.S. government's Project Warp Speed, determined how to make and distribute hundreds of millions of COVID vaccine doses in months. This accomplishment [required countless creative hacks](#) that AI systems wouldn't have known were options, like deploying Army cargo planes to deliver critical production equipment and supplies in emergency situations.

Why intuition matters

Philosophers, writers, neuroscientists, and others have been [fascinated](#) with intuition for centuries. It's generally defined as the ability to synthesize experiences, acquired knowledge and even more abstract inputs (ethical or emotional implications, perhaps) and convert them into creative, adaptive, often original insights and actions.

We usually think of intuition as something that is instantaneous, unconscious, and effortless — like when we instantaneously know to stay away from a car because we sense the driver may be intoxicated. But a major ingredient of intuition is implicit knowledge, the [unconscious understanding](#) that we bring to the reasoning and critical thinking we do when we do not need to make a snap judgement. When a great cook runs out of a key ingredient but figures out how to compensate to make the meal even better, that's intuition. When Einstein — one of the greatest intuitive thinkers of all time — came up with thought experiments that allowed him to discover the theory of relativity while others labored over the math, that was intuition.

As Einstein is said to have claimed: “the intuitive mind is a sacred gift and the rational mind is a faithful servant.” In other words, intuition is like a magical pixie dust that we apply to situations throughout our lives, in ways large and small — when we parent, improve our golf and perform at work.

Conversely, the lack of intuition can be costly. I saw this play out dozens of times during decades as a management consultant, often when companies thought they could replace savvy veterans with technology. Once, a freshly hired analyst for an aircraft manufacturer — someone with experience with computer systems, but no accumulated intuition about aircraft manufacturing — accidentally keyed in an order for 100x the needed number of wing components into a newly installed MRP system (the sexy new technology at the time). Even after reviewing the order, his lack of experience prevented him from catching the obvious error, and it cost the company tens of millions of dollars.

Humanity's secret weapon over the machines

Barring any unexpected technical breakthroughs, intuition is likely to remain a critical human advantage. Our world is probabilistic and chaotic. The unanticipated happens. This means that our AI friends will always be faced with situations and conditions they haven't been trained to deal with. While it's certainly a [topic of debate](#), most neuroscientists don't see a way — at least not yet — for AI to acquire the power of intuition.

Of course, intuition is not always right, either. It's a [horrible guide](#) when it comes to picking stocks to buy, as author Daniel Kahneman explained in his best-selling book “Thinking Fast, Thinking Slow”.

But in the Age of AI, having the intuition to try new ideas — even if they are wrong — will be a feature rather than a bug. As technology companies invest in once-unimaginable amounts of processing power to run ever more complex AI models, intuitive people and organizations will be able to explore and test their hunches faster than ever before.

In fact, research — not to mention good old common sense — shows that we do in fact learn more from our mistakes than our successes. This isn't hypothetical. We literally learn more from making and then having to [correct our errors](#), than from getting the answer correct the first time.

Humans have always worried about the impact of powerful new technologies, from Gutenberg's printing press to the iPhone. So far, there's no conclusive evidence that our intuition has suffered. But the potential downsides of AI — particularly generative AI, with its ability to let us ask any question about any topic and get back straight-forward answers, all in our native tongue — are undoubtedly serious.

Millions of students have come to rely on GenAI to study and write term papers. Software developers are letting systems such as Microsoft's GitHub CoPilot write a large percentage of their lines of code. In our personal lives, many of us are relying on AI-based services to help manage our finances, pick our outfits and provide medical advice. The technology is [catnip](#) to our curious, efficiency-seeking brains.

Maintaining our intuitive edge

There's no simple formula for how to maintain one's intuition in an AI-infused world — but it will clearly be important to get in the habit of taking stock of where we have an intuitive edge worth protecting or nurturing. Most of us may happily part with our innate sense of direction and instead rely fully on GPS services like Waze, but Uber drivers and long-haul truckers should think twice. After all, the power will go out on occasion, and you will find yourself in areas without decent connectivity. AI may render your knack for picking the perfect restaurant obsolete, but you don't want to lose the sixth sense for spotting market opportunities that's fueled your career success.

Also, be aware that intuition will be hard to regain once it's lost. Like the frog in the pot of boiling water, you won't realize you're in trouble until it's too late. Then, while your more intuitive peers are using AI to test and generate still more informed hunches, you'll be coming up with fewer and fewer original ideas and falling behind faster as time goes on. The student who leverages Chat-GPT to research an assignment but writes it himself will likely become a better writer. The student who lets the chatbot do all the work will fear writing even more in the future.

Here's a real example for how to maintain a healthy balance between technological innovation and human capability: the calculator. When pocket-sized, spill-proof calculators were first introduced in the 1970s, educators and parents worried that students' math performance would suffer. It didn't happen, because school districts refused to stop teaching basic math skills. While fewer students can do long division in their head, the broad [consensus](#) is that calculators have helped students master more complex mathematical concepts.

So let the calculator example inspire you. You can either resist using AI for fear it will diminish us or rely on it too much to make our lives easier and more efficient. We'll all need to find the balance that will improve our lives not only by making them simpler, but by amplifying that which makes us special.

Please send comments or questions to: mburman@burman6.com

Mitchell H Burman A bit more about me: I spent 40 years leading advanced analytics and AI projects as well as education programs with organizations including HP, J&J, McKinsey & Co and MIT. I currently work with The [Return on Artificial Intelligence Institute](#) ("RoAI"), helping companies apply the principles of AI. We've built an executive education program, including a novel game that illustrates the powers of AI by simulating the running of a bar, a diagnostic to determine an organization's AI readiness, and a process to implement AI while maintaining a healthy balance between man and machine.