



andonix

*a good idea*  
**SHINES**  
*on its own*

*How Cooper Lighting Has Perfected  
“The Art of Working Smarter” by  
Empowering its Workforce*



A CUSTOMER SUCCESS STORY



# A Good Idea Shines on its Own

How Cooper Lighting Has Perfected “The Art of Working Smarter” by Empowering its Workforce.

From home lighting to outdoor luminaires and UV-C disinfection, Cooper Lighting Solutions is a global sustainability-focused company that creates products that touch our lives in one way or the other almost every day.

A part of Signify, world leader in lighting and committed to creating a smarter, safer, and brighter world with its high-quality lighting solutions, Cooper Lighting houses a total of 27 specialized brands in various segments within its portfolio. For a company of this size and scale, technology solutions that aid production need to be fast, comprehensive, and have the ability to handle complexities.

**They found the perfect partner in Andonix.**

## The Challenge

The Cooper Lighting team was facing challenges in various areas, but the most crucial among them were in-factory material flow and supply issues that are synonymous with assembly line downtime, directly impacting production.

Although these shutdowns were reported in production, there wasn't sufficient data to

permit subsequent analysis and provide an overview of response times, how long it took to rectify the problems and how they were addressed.

This triggered a series of situations that affected the company's ability to keep costs down, achieve production goals, eliminate scrap and reduce the inventory of finished goods.

Additionally, Cooper Lighting, like many other labor-intensive companies, operated in an environment exposed to high staff turnover. The need for a comprehensive solution that helped address day-to-day issues while preventing the frequency of their occurrence was apparent.

## The Smart Solution

**Smart Work Station**, Andonix's software solution that digitizes workflows, connects workers and machines to report critical operative data in real-time, was deployed to address the scenario.

The team worked with the Operational Excellence department within the organization to tackle these challenges to drive operational productivity.

The goal was twofold:

- Getting rid of interruptions in the supply chain for each of the production lines.
- Minimizing machine downtime and unplanned breakdowns.

# How We Did It

## *Deployment of Smart Work Station*

Finding a way to communicate with each product assembly line, also referred to as a production cell (consisting of a team of workers building one specific product at a time) to identify, contain and avoid any disruptions was key. In the trial phase, web-connected screens and tablet computers were strategically placed in each production cell, empowering workers to activate the Digital Andon App module within Smart Work Station. The Digital Andon includes a series of automated problem-specific communication channels, configured by the client for each specific purpose, that may be activated by the worker (or an IoT-ready sensor) via digital buttons from any screen or connected device (cell phone and tablets). Once a channel or alert button is activated, the worker is presented with a screen that resembles WhatsApp, eliminating the need for any training.

The revolutionary aspect of the Digital Andon is a smart chatbot that connects the person who raised the alert with the appropriate person within the organization who can resolve the issue. When there is a delay in response, the chatbot automatically escalates the problem to the next level within the organizational hierarchy or individuals designated by the organization during the channel's simple setup process. As a result, operators are able to report a challenge, problem, or material supply shortage and interact with the parties who can help resolve the issue. Incidents are therefore rectified within record time.

## *Company Culture as the Key to Success*

At Cooper Lighting, continuous improvement is among the core values that drive productivity within the organization. Therefore, during the trial phase of deployment of Smart Work Station, each production cell team worked hard to avoid any downtime or failure that would halt production.

During the initial few weeks of adopting this new technology, the Operational Excellence team created digital standard operating procedures enhanced with multimedia-rich visual aids and "how-to" tutorials - all accessible via Smart Work Station. It also organized training sessions and assigned technicians to follow up and make sure that events were being addressed. This fast-tracked the initial learning curve and generated visible success stories on the shop floor within a very short period of time.

**In just three months, Smart Work Station was successfully implemented across half the production cells at Cooper Lighting, empowering a couple of hundred workers.**

It has not only become a part of their daily routine but has also aided the team tremendously in their pursuit of continuous improvement. Today, most production area workers at Cooper Lighting have the Smart Work Station and the Digital Andon App available at their production cells, while supervisors and staff plant personnel all have it on their mobile devices and desktops.

# The Way Ahead

Cooper Lighting's immediate short-term vision is to expand Smart Work Station to all of its production cells and connect an over 1,500- individuals strong workforce in three shifts to this empowerment tool.



Using Smart Work Station, all employees will be able to measure and improve both their machines and their own performance.

Smart Work Station marks a categoric 'before and after' at Cooper Lighting. Operators now have a voice in case they encounter a problem on the production line, resulting in it being addressed immediately. Executives now have a full overview of all situations in real-time, with a wealth of data that wasn't available before, all accessible from any device in real-time.

Additionally, other functions within Cooper Lighting have started to use the Andon system as a tool to improve communication and connect all departments through a single platform. A clear example of this is how the department of Operational Excellence uses the Digital Andon system to generate digital KAN-BAN for the Logistics Department.

This allows both teams to understand the status of material requirements, the exact process where the material can be found, the waiting period for specific materials, and the overall cycle time of the internal supply process from the requirement to delivery at the point of use. This has resulted in the internal supply chain process becoming more robust and efficient.

Such is the success of Smart Work Station that managers from other Signify locations have expressed interest in this revolutionary technology and have identified use cases where it could be deployed to augment production, reduce scrap, improve overall quality performance and reduce operational costs.



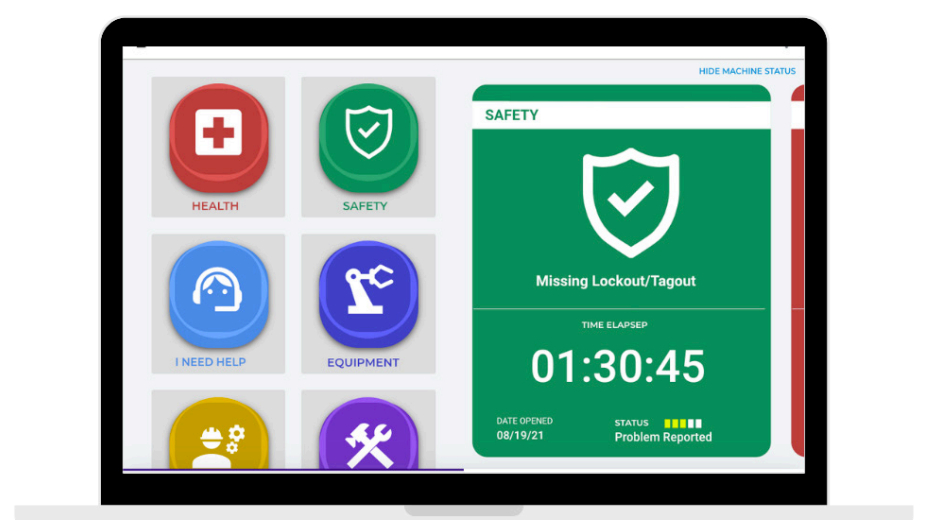
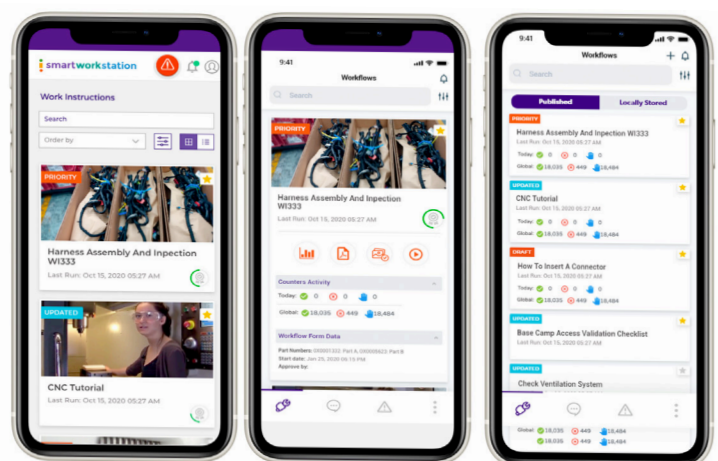
# Sparks of Success - How it All Started

Much before Smart Work Station was deployed to resolve material supply chain issues, there were multiple use cases where Smart Work Station was successfully leveraged to completely transform hitherto manual and extremely cumbersome but crucial processes.

**1. Environment, Health, and Safety:** Audit reports for environment, health, and safety compliance were filled out on physical sheets and then converted to digital formats using Excel. Smart Work Station completely eliminated the need for paper-based audits and also brought in evidence-based reporting where non-compliance could be reported with pictures for subsequent corrective action. Within two months, the Cooper Lighting team was able to scale the level of audit completion to 100% and conducted as many as 250 inspections, a previously unattainable goal. Furthermore, the team was able to free up one team member who was previously dedicated full-time to just consolidating data and creating reports.

**2. Process Audits:** Layered Process Audits (LPAs), conducted across all departments and involving staff and management throughout the organization, are integral to the company's continuous improvement practices. Smart Work Station brought about significant efficiencies in carrying out LPAs, resulting in over 1,500+ audits being conducted in 2021 across Cooper Lighting on a variety of processes with 95% accuracy and consistency.

**3. Quality Improvement:** Assessment of quality for products coming off the production line is a common practice in most companies - those with the highest standards measure quality levels using the parts per million (ppm) metric. The aim is to have as low a count as possible. Armed with Smart Work Station, Quality auditors were able to inspect more than 86,000 products through 8,000+ separate quality audits on a quarterly basis. Since the roll-out of Smart Work Station, quality standards have improved by as much as 70%.



# Client Testimonial

*“The Digital Andon has significantly impacted our ability to gather crucial information directly from the factory floor on disruptions that teams and processes face on a day-by-day and shift-by-shift basis. We now have access to a wealth of information that we never did before. And thanks to the flexibility and adaptability of the system, our leadership has asked us to “Andonize” as many areas and work functions as possible.”*

**José Luis Brana**

Warehouse Supervisor at  
Cooper Lighting

**“We are proud to be part of the transformation that Cooper Lighting is undergoing to shine better and brighter as it embraces Industry 4.0.”**

**César Hernandez**

Lead at Customer Success at Andonix

