

5 Ways AI-Powered Video Systems Support Supply Chain Efficiency





Introduction

E-commerce sales have skyrocketed by more than 20x over the past 20 years, now making real-time visibility essential when tracking product movement throughout the supply chain. To stay competitive, organizations—retail-focused or not—are adopting digital tools to gain more granular insights into their operations, respond to inquiries faster, keep their employees safe, and operate at the high levels of efficiency that today's market demands.

Unfortunately, meeting that demand is harder than ever. Supply chains are overwhelmed due to a perfect storm of complications. Labor shortages are resulting in decreased headcount on-site. Massive increases in orders and returns are overtaxing the employees that are available. Delays in raw material and shipping are interfering with shipping schedules. Add in the residual challenges from the COVID-19 pandemic and the need for better visibility into supply chain operations becomes mandatory.

Security camera technology has significantly advanced in the past few years, working beyond the traditional theft deterrence and investigation use cases. More modern solutions are embedding

AI and machine learning into video management technology, which provides real-time insights and supports safety and efficiency initiatives.

THE NEW VIDEO UPGRADE: INTELLIGENCE

Samsara's Connected Operations platform allows customers to harness IoT (Internet of Things) data across their operations. From monitoring physical locations through our Site Visibility security camera solution to providing real-time data into fleets on the road with Vehicle Telematics and AI-Dash Cameras, organizations are modernizing and connecting their technology stack. What's more, these Samsara technologies enable organizations to gain better insights into their supply chain via a centralized, cloud-based platform.

We're at a time when reduced costs, improved operational efficiencies, and streamlined workflows have become critical for operations. Let's look at five ways Samara Site Visibility can support and improve a company's supply chain operations.

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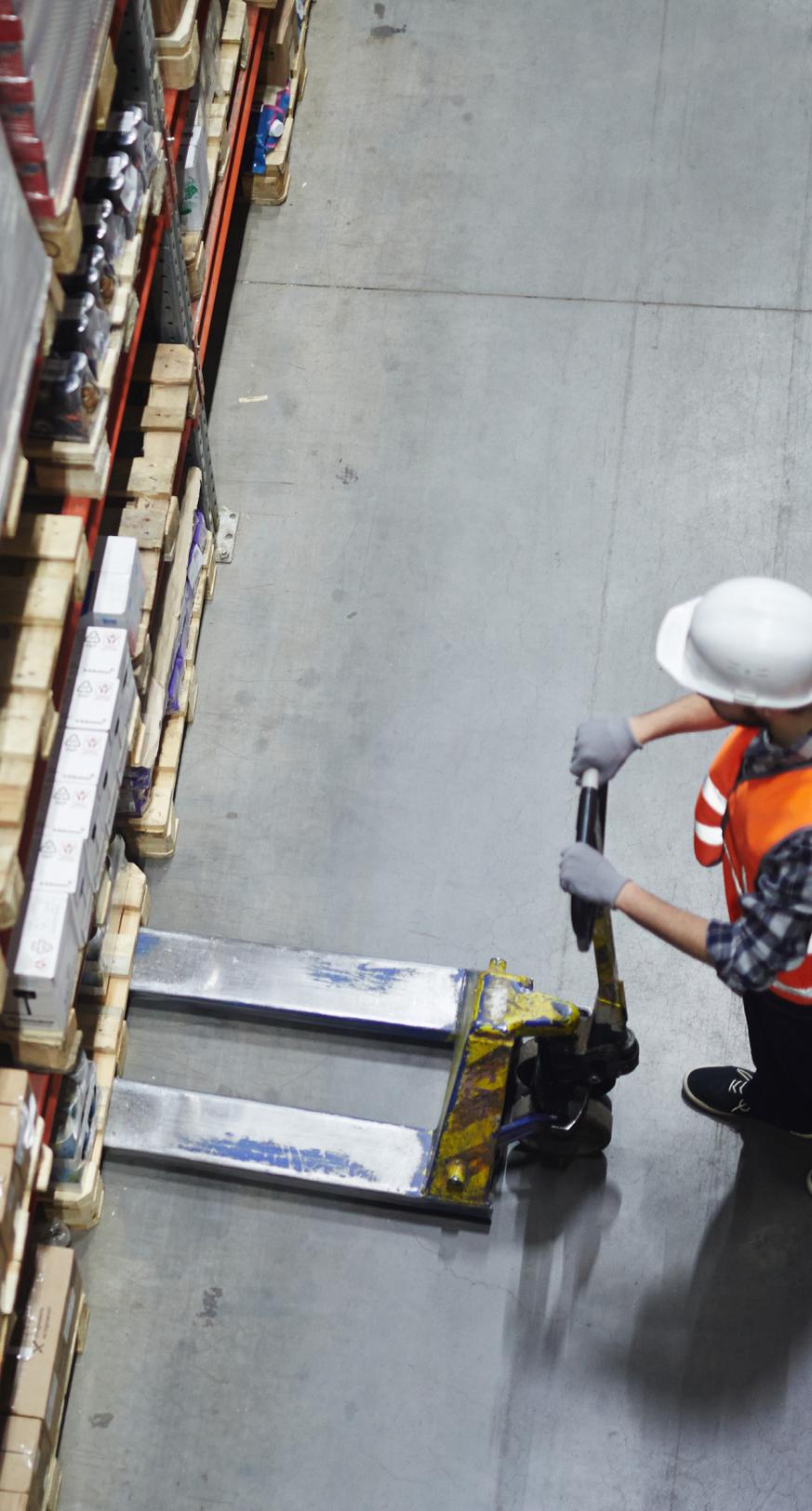
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01

Reduce Product Shrinkage

While there are many solutions that capture production, delivery, and transfer of goods, few organizations also leverage security camera systems to monitor site operations. Advanced video monitoring systems can review how goods were damaged during transference, identify when proper protocols were and weren't followed, and notify of unplanned downtime. It's this level of granularity that can make the difference between full or reduced deliveries.

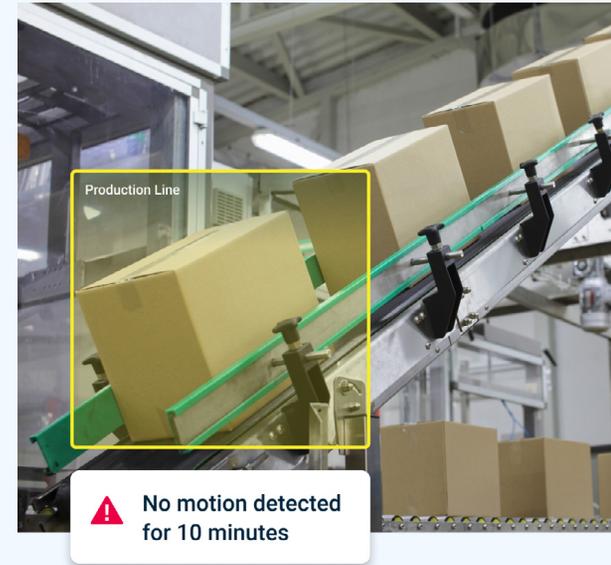
An advanced camera system goes beyond simply providing historical video confirmation when delivery vehicles enter a truck yard. A system like Site Visibility can offer real-time alerts to site managers when vehicles enter a truck yard or dock for faster processing. Using Site Visibility's AI-driven video search, site managers can trace the delivery through the facility into storage and identify if and how damage has occurred.

By streamlining investigation, operations leaders can find, review, and share footage quickly and easily. Granular user permissions allow more authorized business stakeholders to access only the camera footage they need, while cloud-based access enables those users to check on dispersed yards and vehicles from anywhere.

"We kept finding new things to look at with the cameras, new insights and things to improve. The system just makes sense. We're already seeing major improvements in efficiency."

RONNIE ROBERTSON

President, Logistics Warehouse



LOGISTICS WAREHOUSE

Increasing efficiencies with intelligent monitoring

Logistics Warehouse, a transportation, product manipulation, and warehousing company uses Samsara Site Visibility to remotely monitor their production lines and set up inactivity alerts. By restructuring their team's workflow and more quickly addressing unplanned downtime, they produce 45% more a day, increasing profit margins by 8%. Implementing Site Visibility enables Logistics Warehouse to get enhanced visibility into their operations to reduce product shrinkage and protect their bottom line.



02

Prevent Catalytic Converter Theft

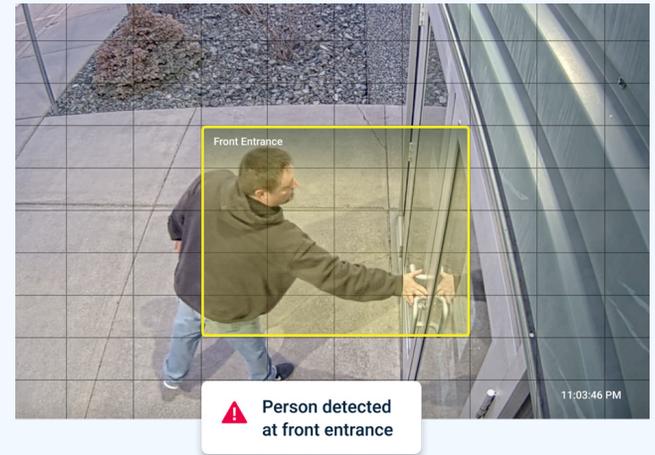
According to the National Insurance Crime Bureau (NICB), reported catalytic converter thefts have increased by over 300% in the past year. A new converter (plus repairs) can cost upwards of \$3,000 and the drastic increase of thefts means replacement parts are in short supply. It can be weeks, even months, before that vehicle can get back on the road, costing companies thousands more in downtime and lost business.

A smart security camera solution can help prevent these thefts and reduce unexpected vehicle downtime. Not only does the presence of security cameras reduce instances of break ins and theft, but Samsara Site Visibility provides three vital services to protect your sites:

- Close monitoring of your vehicles and locations
- Collection of hi-resolution, easily-searchable video evidence
- Proactive alerts directly to your phone or email for unusual, after-hours activity

Site Visibility allows site managers to check in on yards, vehicles, and warehouses from anywhere. By configuring alerts to be notified of after-hours events or if a device goes offline, it's a seamless way for operations leaders to ensure their security camera system is functioning 24/7 and capturing critical footage. With these alerts (via email or SMS) and simple footage exporting, users can also quickly share evidence for a police report or insurance investigation.

This level of after-hours intelligence and alerts ensure your trucks stay on the road and your products continue to move through the supply chain.



RELIANT HOLDINGS

Reliably capturing video to reduce thefts

Vance Vanderburg, the Chief Operating Officer of carbon dioxide distribution company, Reliant Holdings, has noticed a real difference since upgrading to Site Visibility.

“We had some off-the-shelf security systems, but after an incident, we went back and the data was no longer there,” He told us. “(Site Visibility) has already helped one of our facilities where people were breaking in and stealing certain items. If you don’t have Site Visibility, you’re typically not going to have any luck finding a culprit or preventing it.”



03

Decrease Detention Time

The faster companies can get their trucks back on the road, the faster they complete deliveries, and the easier it is for them to cultivate and retain happy customers, while delays can lead to reduced productivity and profitability. Advanced video management systems give companies both real-time and historical visibility into their operations, enabling managers to proactively handle onsite issues.

Site Visibility, combined with geofencing (available through Samsara's vehicle gateways), allows site managers to create triggered alerts when vehicles enter or leave a yard. Supervisors can immediately receive a message, unload those trucks faster, and most efficiently deploy dock workers. By providing floor supervisors with automated access to specific alerts, it creates additional oversight without spending extra person-hours.

In addition to real-time alerts and visibility, Site Visibility also captures and stores video footage of loading and unloading. Remote or retroactive study of the footage (with the help of intelligent search) can help sites review dock activities and implement coaching plans to improve dock efficiency and reduce detention time.



A non-operating dock burns

~ \$1700 PER HOUR¹





04

Minimize Workplace Injuries

There is no shortage of occupational hazards in the industrial sector—2018 saw nearly half a million workplace injuries in the manufacturing space alone. A company that ensures proper safety protocols, quickly investigates incidents, and provides ongoing coaching can prevent injuries and ensure their business is operating at full speed.

Traditionally, most video security systems focus solely on theft prevention. However, intelligent video security solutions like Site Visibility use AI features to monitor and improve onsite safety as well. For instance, Site Visibility's Clothing Detection feature can surface instances of uniform or personal protective equipment (PPE) non-compliance. Floor Plan allows users to perform virtual site walkthroughs to monitor safety practices while Areas of

Interest allow safety managers to prevent workers from entering hazardous zones.

Site Visibility's intelligent search features can remotely identify unsafe behavior and help proactively promote safety. The intuitive and easy-to-use platform allows customers to quickly find and share evidence with insurance for workers' compensation claims or build a library of clips for ongoing coaching.

FOOD EXPRESS

Intelligent video to support security and safety

Food Express, a bulk transportation business based in California, uses Sites Visibility to promote worker safety and remotely review onsite activities to ensure their operations continue to run smoothly.

Jim Terry, Director of IT, experiences a "24/7 incident flow"—meaning Samsara automatically monitors their operations round-the-clock, collecting incidents for review and alerting the appropriate stakeholders if and when anything unusual occurs. With 12 dispersed sites, this makes it easier to monitor after-hours activity and be alerted if there's a security concern.

Food Express also operates a large fleet that includes tankers that have to be regularly washed to ensure food safety—and the employees who wash them are required to wear special protective harnesses. Site Visibility enables the company to identify when employees aren't wearing those harnesses and to send video proof to the appropriate managers to promote ongoing safety coaching.

By leveraging intelligent detections and proactive alerts and easily sharing video footage, Food Express gains enhanced visibility into their operations.



05

Improve Employee Productivity

AI-powered video security systems don't just help prevent thefts and losses, they can also help build a stronger company culture and improve employee morale.

Highly engaged teams show²

21% GREATER PROFITABILITY

59% LESS TURNOVER

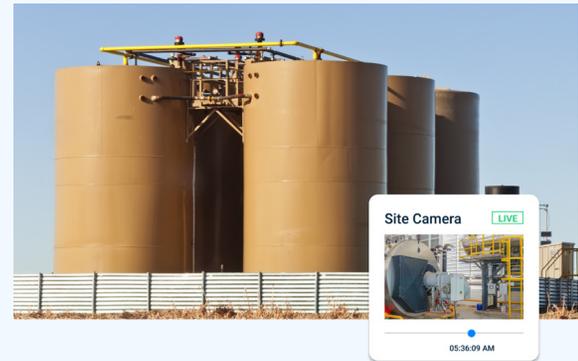
2. *Forbes*

Site Visibility's high-definition video capture, search, and storage makes it easy to collect footage to support a variety of key employee processes, including:

- Skills training
- Safety coaching
- Remote site check-ins
- Displaying best practices
- Ensuring uniform compliance

With Site Visibility, easily save important video clips to build out a training library or to review directly with employees for ongoing coaching. In doing so, organizations can improve employee morale, and recent [studies](#) show this directly impacts an organization's productivity.

Site Visibility is also useful for remote assistance, which can cut field-service costs by [up to 40%](#) and vastly reduce the need for executive travel. When a supervisor can view multiple sites without leaving their office, they can significantly save time and money and can more immediately address concerns happening across sites.

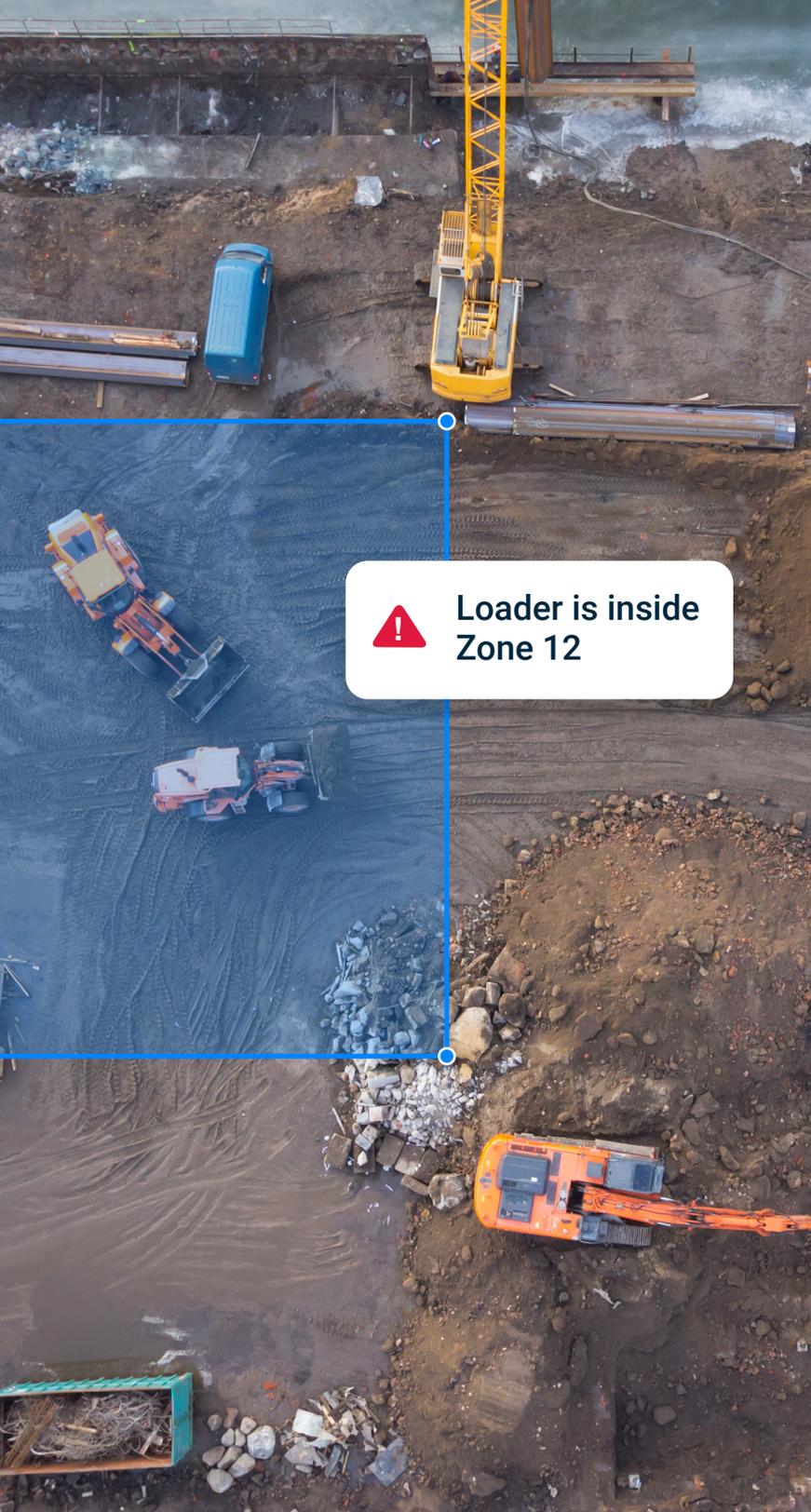


DELTA CONSTRUCTORS

Fueling up their safety program

Delta Constructors, a full-service oil and gas contractor, leverages Site Visibility to complement their already robust safety program. Aaron Schilling, Director of IT, would previously spend hours sifting through footage if an incident was reported, and would then have difficulty sharing the footage.

With Site Visibility, the team can now easily search for and share coachable moments. When an employee wasn't following proper protocols and dropped a hazardous piece of equipment, the team used Stream Search to analyze the incident and then held a training to remind employees of safety best practices. "We love being able to share and export footage of incidents and dive deeper into what happened," Schilling told Samsara. "The technology provides great coaching moments to show what safety means to us at Delta."



Creating Advances, Monitoring Change

Keeping a supply chain intact, or improving it, is a challenge in any industry. Companies that leverage the best possible technology can reduce costs, prevent equipment losses, and foster a safer and more productive work environment. Site Visibility allows our customers to access cutting-edge video technology to support supply chain efficiency.

At Samsara, we provide our operational customers with advanced and innovative technologies, and we constantly release new features and products to continue to support our customers' needs. With 200+ product updates released last year alone, our culture is one of rapid innovation, driven by customer feedback.

To discover how Samsara's solutions can help your company, join an upcoming [Site Visibility webinar](#) or check out our vast library of resources and content at samsara.com/sites.

About Site Visibility

Site Visibility is an intelligent video management system (VMS) that consolidates 3rd-party camera streams from across locations into a single dashboard and overlays AI, making any IP camera a “smart” camera. Users derive real-time data and insights from their video footage and spend less time sifting through footage, worrying about preventable incidents, or troubleshooting their network.

With traditional security camera systems, customers lack the tools to quickly investigate incidents. They can spend hours traveling between locations to search for video evidence, and often realize their cameras were offline and hadn’t captured the critical footage they needed. Sites Visibility allows users to securely access video data to identify, diagnose, and resolve incidents across the business.





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