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the missing piece of CCTV

THE FOOTAGE WHISPERER

"SEE WHAT THE CAMERA SAW"

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**UTILITY VALUE OF
COM-SUR™ FOR
SUPPLY CHAIN,
WAREHOUSING, AND
LOGISTICS**

WELCOME



AUDIT HOURS OF FOOTAGE IN MINUTES FIND OUT HOW COM-SUR, THE BEST 'MOUSETRAP' WILL HELP

["Seeing is believing - See what the camera saw"](#)

CCTV and other forms of video surveillance are commonly used by most organizations to monitor their supply chain, warehousing, and logistics operations, but footage is often only reviewed reactively. Intelligent incident reporting. Our company realized this problem early-on and has developed the world's only CCTV video footage auditing software that encourages daily auditing (hours in minutes) of CCTV footage, filling the gap for a complete "workflow". The software works with existing cameras and VMS, regardless of type/brand, and provides a standardized approach for intelligent incident reporting. Our software also offers exceptional investigative capabilities.

'COM-SUR' – THE WORLD'S ONLY CCTV/SURVEILLANCE VIDEO FOOTAGE AUDITING, SMART BACKUP, AND STANDARDIZED INTELLIGENT INCIDENT REPORTING SOFTWARE – THE MISSING PIECE OF CCTV/SURVEILLANCE VIDEO

COM-SUR is the world's only CCTV/surveillance video footage auditing, smart backup, and standardized intelligent incident reporting software that serves as a complete workflow and force multiplier. It helps audit 24 hours of footage in minutes, reduces data size, creates standardized intelligent reports, and delivers business intelligence. COM-SUR helps unlock hidden information in CCTV/surveillance video footage and enables people to gain actionable intelligence, improve homeland security, prevent crime and losses, identify and mitigate threats and hazards, and improve operational efficiency. It empowers people to gain new jobs as CCTV/surveillance video footage auditors and start new businesses of auditing video footage. Like MS Office, COM-SUR is an enabler that makes it easy to work with CCTV and other surveillance cameras in a standardized way, leading to better decision-making. It also offers exceptional investigative capabilities.

HOW COM-SUR SMARTLY REDUCES 'VIDEO' STORAGE SIZE

COM-SUR employs an innovative approach to

smartly reduce the amount of video to be audited and consequently the storage size of videos. Regardless of the video's frame rate, COM-SUR captures a single screenshot of the consolidated 'moment' of 'that' one second, when the I, P, and B frames come together. This method significantly reduces data size without sacrificing vital information. It goes without saying that when multiple cameras are displayed in a grid view, say 4x4, the storage size is further reduced since all the cameras are captured as a single image. Since no suggestion is being made to replace the actual video with screenshots, COM-SUR acts as a wonderful supportive technology both to audit (review) just 86400 frames representing 24 hours and reducing the data size at the same time.

SUPPLY CHAIN, WAREHOUSING, AND LOGISTICS CHALLENGES

1. Shrinkage and theft:

Organizations constantly face the prospects of shrinkage and thefts in their supply chain, warehousing, and logistics operations.

2. Vandalism and property damage:

Unauthorized access, trespassing, and acts of vandalism can result in property damage and loss. This can include damage to infrastructure, equipment, and cargo, leading to delays and additional costs.

3. Threats to vehicles transporting cargo:

Vehicles transporting cargo to and from the warehouse also face several security threats like thefts, hijacking, sabotage as well as other issues like driver negligence, driver fatigue, driver misbehavior, collusion, and so on.

4. Inventory management:

Effective inventory management is crucial to optimize operations and minimize losses. Challenges include inventory inaccuracies, stockouts, overstocking, and the risk of shrinkage or spoilage.

5. Unsold inventory:

Organizations have deal with the issue of unsold inventory which keeps piling up and thereby presents several challenges for storage and maintenance.

6. Employee safety:

Warehouse and logistics facilities involve manual labor, heavy machinery, and potentially hazardous materials. Ensuring employee safety and minimizing workplace accidents and injuries is a critical challenge.

7. Compliance issues:

The logistics sector must comply with various regulations related to transportation, storage, handling of hazardous materials, customs, and security protocols. Ensuring compliance with these regulations can be complex and time-consuming.

8. Insider threats:

Organizations have to deal with insider threats from disgruntled employees or even unwitting staff who fail to follow proper security and safety measures, thereby causing a disruption in their supply chain, warehousing, and logistics operations.

9. Humongous growth of surveillance video:

The exponential growth of surveillance cameras has resulted in an unprecedented surge in

surveillance video. Effectively managing this data has become a daunting challenge due to the massive storage capacity required, especially considering the prolonged retention periods necessary for security, incident investigation, or legal purposes. Furthermore, the prevalence of high-resolution video with increasing megapixels compounds the storage demands, making efficient data management an urgent priority for organizations grappling with the immense volume of surveillance footage.

COVID-19 PANDEMIC

The pandemic severely impacted supply chain, warehousing and logistics operations worldwide. Many warehousing operations had to be temporarily suspended leading to inventory shortages in several sectors like e-commerce, retail, manufacturing, etc. Also, there were several instances of labour disruptions due to warehouses reducing the number of employees due to the lockdowns and implementation of physical distancing measures. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

USE OF VIDEO SURVEILLANCE FOR A SUPPLY CHAIN

In case of a supply chain, video surveillance is primarily used at warehouses as well as in the vehicles transporting the cargo to and from the warehouse. Usually, most warehouses have video surveillance covering the following areas:

- Entry and exit points
- Parking area

- Loading and unloading areas
- Goods reception area
- Repackaging area
- Storage area
- Picking (or order preparation) area
- Dispatch area
- Equipment maintenance area
- Warehouse office(s)
- Other areas that are deemed to be critical

Further, the concerned stakeholders at warehouses generally need to review and analyse recorded CCTV video footage from time to time for investigating incidents and/or accidents, and other issues in order to corroborate evidence as well as assist Police/other Law Enforcement Agencies.

DRONES

Several warehouses have begun to employ drones with specialised cameras for purposes such as inventory management (inventory audit, stock taking etc.), inspection (checking for signs of any damage on the roofs, racks, pallets (a transport structure for storing and supporting goods which is lifted with the help of a forklift), walls, and ceilings, and overall surveillance of the warehouse premises.

DASH CAMS

In case of vehicles transporting the cargo to and from the warehouse, there has been a surge in the installation of dashboard cameras (or dash

cams as they are popularly known) along with rear and inside cabin cameras and mobile DVRs (Digital Video Recorders). These cameras continuously record footage while the vehicle is in transit, and are usually remotely live monitored. This greatly helps, especially in case of an accident, to send timely assistance. Besides, the recorded footage aids in identifying the cause of the accident, thereby helping in insurance claims and further investigation. The footages along with various specialised sensors are also used to verify instances of over speeding, tailgating, harsh braking, night driving, etc., and also for monitoring driver behaviour and fatigue.

LIVE MONITORING – CHALLENGES

Several organizations have a dedicated control room with operators, set up for live monitoring of CCTV and other cameras such as drones and dash cams for their supply chain, warehousing, and logistic operations. However, live monitoring comes with its own set of challenges of video blindness, poor attention span, boredom, operator bias, false alerts, and so on.

Moreover, these cameras continuously capture and record humungous amounts of video data. It therefore becomes a daunting task for the operators to review and analyse this data whenever the need arises. Thus, it may be noted that benefits from video surveillance systems can accrue only when they are used optimally, suggestions for which are enumerated further on, in this document.

COMPLIANCE - GENERAL

Conformity or compliance in any organization means adherence to laws and/or rules and

regulations, various standards, as well as data storage and security requirements as laid down by government bodies, governing bodies of the respective industry, or the management of the organization. When an organization complies with the requirements mandated by government and/or governing bodies, then it is termed as 'regulatory compliance' which enables the organization to run in a legal and safe manner.

COMPLIANCE - AUDITS

Several organizations carry out compliance audits on a regular basis to avoid the potential consequences of non-compliance. A compliance audit examines how well an organization adheres to compliance requirements. Some organizations use video surveillance to monitor compliance issues and audit recorded video footage from time to time for investigating and preventing compliance issues. Auditing video provides actionable insights on the level of compliance within the organization.

AUTOMATED SOFTWARE – WHY THEY WILL NOT WORK IN ISOLATION

In the wake of the Christchurch shooting incident, several high-profile places of worship considered deploying gun detection technology. However, there are concerns about its efficacy, since it may not be able to detect all types of weapons, or the perpetrator could still create damage before being detected. Similarly, automated systems like video analytics, AI/ML can only detect what they have been programmed for. What about the rest? Again, these technologies are prone to triggering huge amounts of false alarms. Also, since the permutation combinations of

exceptions can be vast and varied, it becomes almost impossible to automate every kind of exception. Facial recognition technology also raises ethical and privacy concerns, and has been found to produce inaccurate results, especially for certain ethnic groups. Therefore, experts suggest that while automated technologies will continue to grow, human intervention and intelligence will still be necessary to verify alerts and ensure their efficacy.

“CCTV AND OTHER FORMS OF VIDEO SURVEILLANCE ARE NOT ENOUGH – WE MAKE IT WORK FOR YOU”

While it is not being suggested that optimal usage of video surveillance can cure all issues, several issues of the following kind can be addressed by doing just a little 'more' with respect to making the optimal use of video surveillance systems:

- Goods related issues (loss/pilferage, damage, goods placed in restricted areas like passages and/or emergency exits) i.e., visual goods tracking (Tracking goods' movement through the warehouse, enabling more efficient handling of complaints, and recording deviations observed, if any).
- Accidents and other related issues
- Potential causes of fire
- Recces/suspicious movements /activities/
- Insider job/security lapses
- Fraud/loss/corruption/theft
- Unauthorized/unlawful activities/visitors

- Unruly staff/visitors
- Staff negligence
- Inattentive staff (e.g. guard sleeping)
- Violence and vandalism
- Human rights violations
- Wastage of resources
- Health and safety issues
- Issues with female staff
- Housekeeping issues
- Cameras/recorder malfunctions

So, what is the 'more' that needs to be done?

1) AUDIT CCTV AND OTHER SURVEILLANCE VIDEO FOOTAGE DAILY AS A STANDARD OPERATING PROCEDURE

'Auditing' means 'seeing' what the cameras 'saw'. Auditing of CCTV and other surveillance video footage should be done daily (continuous investigation) to identify potential issues and threats. Auditing is a dedicated and systematic process that helps address challenges related to live monitoring and alert-based systems. Auditing helps in evaluating analyzing incidents to improve existing policies, procedures, and processes. Concerned personnel should be trained to become video footage auditors, and the audit teams should be rotated to avoid complacency/collusion. Daily auditing of CCTV and other surveillance video footage can also help in adhering to the principles of Kaizen and

TQM for business improvement.

2) DOCUMENT AUDIT FINDINGS/INCIDENTS

Audit findings/incidents should be documented in a standardized template to find the root cause to prevent future recurrences. Historical data of such findings/incidents can reveal patterns that can help take better informed corrective and preventive action. If the entire industry reports incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of all stakeholders of supply chain, warehousing, and logistic operations.

3) ENSURE DISASTER RECOVERY OF CCTV AND OTHER SURVEILLANCE VIDEO FOOTAGE – LIKE A ‘BLACKBOX’

CCTV video footage must be stored at multiple locations in order to ensure that even if the recorder is stolen, destroyed or tampered with the data is never lost. Further, any backed-up data must easily be searchable and retrievable; else, it is going to be a nightmare finding the relevant video.

4) DISPLAY DYNAMIC INFORMATION AT RELEVANT PLACES

Document and display details of information that is dynamic in nature in relevant areas.

For example:

1. List of authorized visitors to the warehouse on a particular day (including their photos and other relevant details).
2. List of authorized security guards (including their photos and other relevant details).

3. List of authorised supervisors (including their photos, other relevant details, and their respective duty areas in the warehouse premises).

4. List of authorised vehicles transporting cargo to and from the warehouse (including their photos, vehicle nos., and other relevant details).

5. List of habitual offenders/suspects likely to visit the warehouse premises (a ‘Watch out’ list).

5) USE A POWERFUL NEW SIGNAGE

"WE AUDIT CCTV VIDEO FOOTAGE EVERYDAY".

One size, one color, one powerful message. Across the nation.

DE-CENTRALIZED SURVEILLANCE + CENTRALIZED SURVEILLANCE = OPTIMAL RESULTS

Organizations with multiple locations struggle with centralized video surveillance due to infrastructure cost, internet bandwidth, and operator limitations. De-centralized surveillance offers higher accountability at each location and better situational awareness, leading to more chances of discovering exceptions.

CONCLUSION

“You see, but you do not observe” is a quote by Sherlock Holmes in A Scandal in Bohemia (1891, written by Sir Arthur Conan Doyle). COM-SUR makes 'observation' far effortless and effectual leading to superior results.

"Cameras don't lie" - but how will you know
unless you 'see' what the cameras 'saw'?
Audit video - why suffer!

Get award-winning COM-SUR now. Don't wait
for things to go wrong!

Finally, allow us to present three important
mantras that change the landscape of video
surveillance:

1. Auditing is fundamental – everything else is peripheral.
2. Cameras have lenses – humans have eyes.
3. Let's make cameras 'accountable'.