

**com**<sup>TM</sup>  
**sur**

the missing piece of CCTV

# THE FOOTAGE WHISPERER

# "SEE WHAT THE CAMERA SAW"

GET THE BOOK



100+ TOPICS - AIRPORTS TO ZOOS

GAUTAM D. GORADIA



UTILITY VALUE OF  
COM-SUR™ FOR  
TRANSPORT  
(INCLUDING CASH  
MANAGEMENT)

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 in transport sector world over, but footage is often only reviewed reactively. 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.

#### TRANSPORT SECTOR CHALLENGES

##### 1. Theft and robbery of goods and cash:

The transport of valuable goods, such as cash, jewelry, and electronics, is vulnerable to theft and robbery, both in transit and during loading and unloading.

##### 2. Vandalism and property damage:

Vehicles, infrastructure, and facilities within the transport sector can be subject to vandalism and property damage. Acts of vandalism can disrupt operations, result in financial losses, and impact the safety of workers and passengers.

##### 3. Vehicle hijacking:

Vehicles used for transportation, especially those carrying valuable goods, are at risk of being hijacked and stolen.

##### 4. Unauthorized access:

It is important to ensure that only authorized

personnel are allowed access to the vehicles, loading and unloading areas, and storage facilities.

##### 5. Driver behavior:

Drivers need to follow traffic rules and drive safely, as well as safeguard the goods and cash they are transporting.

##### 6. Accidents:

Accidents involving transportation vehicles can lead to injuries, property damage, and legal liabilities.

##### 7. Workforce safety:

Employees in the transport sector face unique safety risks, particularly those involved in driving, operating heavy machinery, or working in hazardous environments. Adequate training, safety protocols, and ongoing monitoring are necessary to protect the well-being of workers.

##### 8. Maintenance and repairs:

Vehicles require regular maintenance and repairs to ensure they are safe and efficient.

##### 9. Compliance issues:

The transport sector operates within a regulatory framework that governs safety, security, environmental impact, and other aspects. Compliance with regulations related to driver qualifications, vehicle maintenance, cargo handling, and security measures is crucial but can present challenges for organizations.

##### 10. Insider threats:

Transport companies have to deal with insider threats from disgruntled employees or even unwitting staff who fail to follow proper security

and safety measures.

11. 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 the transport sector worldwide. Owing to restrictions /lockdowns, there was a steep decline in passenger traffic in all three modes of transport – air, water, and road. Also, there was a disruption in the global supply chain for goods and materials. This resulted in severe losses for the transport sector. Further, industries that are dependent on the transport sector were also severely impacted. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

#### USE OF VIDEO SURVEILLANCE BY THE TRANSPORT SECTOR

Most transport companies (including cash management facilities) have video surveillance covering the following areas:

- Entry and exit points

- Inside the vehicles
- Loading and unloading areas
- Storage facilities
- Parking areas

Further, transport companies need to review and analyse recorded surveillance video footage from time to time in order to identify potential safety and security issues, compliance with traffic laws, safety regulations, and other policies, address customer complaints or issues such as lost or damaged baggage, optimize their operations, as well as assist Police/other Law Enforcement Agencies. The video footage is also used for training new employees on how to improve their driving and customer service skills.

Besides CCTV, transport companies use other forms of video surveillance as follows:

1. Dash cameras:

Dash cameras are typically mounted on the dashboard of a vehicle and can capture video footage of the road ahead. They are commonly used by transport companies to monitor the driving behaviour of their employees and to ensure compliance with traffic rules.

2. Body worn cameras:

Body worn cameras are worn on the uniform of transport employees. They are used to record interactions between employees and customers, as well as to monitor employee behaviour.

### 3. Thermal imaging cameras:

Thermal imaging cameras are used to monitor the temperature of goods being transported, ensuring that they are being stored at the appropriate temperature. They are also used to detect people hiding in transport vehicles.

#### MOBILE VIDEO SURVEILLANCE FOR CASH-IN-TRANSIT VEHICLES

Transport companies which offer cash management services often employ specialized video surveillance systems to safeguard cash in transit. Cash-in-transit vehicles are equipped with mobile video surveillance systems that consist of multiple cameras strategically positioned inside and outside the vehicle. Interior cameras are installed within the vehicle's cabin and cargo area to monitor the activities of the crew members and ensure the integrity of the cash handling process. Interior cameras may capture the driver's area, passenger area, vault, and other critical locations inside the vehicle. Exterior cameras are positioned on the exterior of the vehicle to monitor the surroundings and potential blind spots. These cameras capture video footage of the vehicle's immediate vicinity, including the front, sides, and rear. They help detect any suspicious activities or attempts at unauthorized access to the vehicle.

#### LIVE MONITORING – CHALLENGES

Several transport facilities have a dedicated control room with operators, set up for live monitoring of CCTV and other cameras. 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:

- Operational issues
- Driver issues

- Customer issues
- Accidents/Causes of potential accidents
- Potential causes of fire
- Health and safety issues
- Recces/suspicious movements/activities
- Loss/theft
- Hijacking attempts
- Vandalism
- Staff negligence
- Inattentive staff (e.g. guard sleeping)
- Insider job/security lapses
- Intrusions, especially by animals
- Unauthorized/unlawful activities/visitors
- Compliance issues
- Housekeeping issues
- Issues with female staff
- 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 all transport facilities report incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of the transport sector.

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

CCTV and other surveillance video footage must be stored at multiple locations in order to ensure that even if the recorder/storage device 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 staff.
2. List of authorized security personnel deployed at the transport company.
3. List of habitual offenders/suspects likely to visit the transport company's 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'.