com sur ™

the missing piece of CCTV

THE FOOTAGE WHISPERER

"SEE WHAT THE CAMERA SAW"

100+ TOPICS - AIRPORTS TO ZOOS

UTILITY VALUE OF COM-SUR™ FOR PUBLIC TRANSPORTATION HUBS (BUS STATIONS, SUBWAY STATIONS, AND OTHER SUCH FACILITIES)

WELCOME

AUDIT HOURS OF FOOTAGE IN MINUTES
FIND OUT HOW COM-SUR WILL HELP

CCTV surveillance is common in public transportation hubs (bus stations, subway stations, and other such facilities) 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 VIDEO FOOTAGE AUDITING, SMART BACKUP, AND STANDARDIZED INTELLIGENT INCIDENT REPORTING SOFTWARE – THE MISSING PIECE OF CCTV

COM-SUR is the world's only CCTV 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 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 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 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.

CHALLENGES FACED BY PUBLIC TRANSPORTATION HUBS (BUS STATIONS, SUBWAY STATIONS, AND OTHER SUCH FACILITIES)

1. Passenger safety and crowd management:

Public transportation hubs must manage large crowds efficiently, ensuring passenger safety during peak hours and busy periods.

2. Criminal activities:

Public transportation hubs are susceptible to various forms of criminal activities, including theft, pickpocketing, kidnapping, vandalism, molestation, and assault. The high volume of people passing through these hubs makes them attractive targets for criminals.

3. Unruly behavior and disorder:

Public transportation hubs often face challenges related to unruly behavior, disorderly conduct, or conflicts among passengers. Such incidents can disrupt operations, compromise passenger safety, and require appropriate intervention.

4. Fare evasion and ticketing fraud:

Fare evasion and ticketing fraud pose significant challenges for public transportation hubs. These issues involve passengers attempting to travel without paying the appropriate fare or manipulating ticketing systems to obtain unauthorized access.

5. Infrastructure vulnerabilities:

The physical infrastructure of transportation hubs, including entrances, exits, platforms, and parking areas, may have vulnerabilities that can be exploited by individuals with malicious intent. Regular assessments of infrastructure and addressing identified weaknesses are crucial for maintaining security.

6. Terrorism and other attacks:

Public transportation hubs are potential targets for terrorist activities or deliberate attacks. Bombings, shootings, or vehicular attacks pose significant threats to the safety of passengers and infrastructure. Perpetrators often conduct pre-operational surveillance of the target area, making it important to detect suspicious activity during this phase to prevent an incident.

7. Emergency preparedness and response:

Public transportation hubs must be prepared to handle emergencies such as fires, natural disasters, medical emergencies, or accidents. Rapid response, evacuation plans, and effective communication systems are essential for ensuring passenger safety and minimizing the impact of emergencies.

8. Insider threats:

Authorities of public transportation hubs have to deal with insider threats from disgruntled employees or even unwitting staff who fail to follow proper security and safety measures.

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 significantly impacted public transportation hubs worldwide. Owing to restrictions/lockdowns, there was a sharp decline in passenger traffic which led to financial challenges for transportation authorities. Many public transportation systems had to reduce their services or adjust their schedules. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

USE OF VIDEO SURVEILLANCE AT PUBLIC TRANSPORTATION HUBS

Most public transportation hubs have video surveillance covering the following areas:

- Station entry and exit points

- Platforms and waiting areas

- Ticketing and information counters

- Baggage screening areas

- Passenger boarding and alighting areas

- Concourse areas and hallways

- Staircases, elevators, and escalators

- Parking areas

Further, buses and subway trains are often equipped with on-board cameras that record the interior spaces, including passenger areas, driver compartments, and entrances/exits. These cameras help capture evidence in case of incidents, monitor passenger behavior, and assist in addressing safety concerns.

Also, authorities of public transportation hubs generally review and analyse recorded CCTV footage to investigate incidents of criminal or terrorist activities as well as accidents or near misses in order to identify their causes to improve safety measures, as well as assist Police/other Law Enforcement Agencies.

LIVE MONITORING – CHALLENGES

Several public transportation hubs 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 humongous 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 CCTV video footage from time to time for investigating and preventing compliance issues. Auditing CCTV 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 IS 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:

- Accidents/Causes of potential accidents

- Potential causes of fire

- Health and safety issues

- Vandalism

- Recces/suspicious movements/activities

- Insider job/security lapses

- Bullying/violence/disputes

- Overcrowding

- Kidnapping/kidnapping attempts

- False allegations and/or claims

- Sexual harassment and/or other kinds of abuse

- Unauthorized/unlawful activities/visitors

- Loss/fraud/theft

- Intrusions, especially by animals

- Inattentive staff (e.g. guard sleeping)

- Unruly staff/passengers/outside workers/security guards

- Parking issues

- Unclaimed/unattended objects

- Housekeeping issues

- Issues with female staff or passengers

- Cameras/recorder malfunctions

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

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

'Auditing' means 'seeing' what the cameras 'saw'. Auditing of CCTV 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 CCTV video footage auditors, and the audit teams should be rotated to avoid complacency/collusion. Daily auditing of CCTV 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 stakeholders of public transportation hubs report incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of all public transportation hubs.

3) ENSURE DISASTER RECOVERY OF CCTV 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 authorised staff.

2. List of authorized security personnel deployed at the public transportation hub.

3. List of habitual offenders/suspects likely to visit the premises of the public transportation hub (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 CCTV - why suffer!

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