com sur™
the missing piece of CCTV

THE FOOTAGE WHISPERER

"SEE WHAT THE CAMERA SAW"

UTILITY VALUE OF COM-SUR™ TO ENHANCE HOMELAND SECURITY WITH SPECIAL REFERENCE TO COMMUNITY POLICING

WELCOME

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

CCTV and other forms of video surveillance are commonly used by nations to enhance their homeland security 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 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.

HOMELAND SECURITY CHALLENGES

1. Terrorism:

Homeland security agencies are tasked with preventing, detecting, and responding to acts of terrorism. This includes the threat of both domestic and international terrorism, such as bombings, hijackings, cyber-attacks, or the use of weapons of mass destruction. Perpetrators often conduct pre-operational surveillance of the target area, making it important to detect suspicious activity during this phase to prevent an incident.

2. Border security:

Ensuring the security of national borders is a crucial aspect of homeland security. Challenges include preventing illegal immigration, drug trafficking, human smuggling, and the movement of illicit goods or materials across borders.

3. Critical infrastructure protection:

Safeguarding critical infrastructure, including transportation systems, energy facilities, communication networks, and water supplies, is essential for homeland security. Threats to critical infrastructure can include physical attacks, sabotage, or cyber-attacks that disrupt essential services.

4. Natural disasters:

Homeland security agencies are responsible for disaster preparedness, response, and recovery. Natural disasters such as hurricanes, earthquakes, floods, or wildfires can cause significant damage and require coordinated efforts to mitigate the impact and provide assistance to affected populations.

5. Insider threats:

Governments have to deal with insider threats from disgruntled employees or even unwitting staff who fail to follow proper security and safety measures.

6. 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 various homeland security initiatives of governments worldwide. In fact, the pandemic introduced several strategic challenges with respect to the political, military, economic, social, infrastructure, information, and intelligence domains for governments. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

HOW COMMUNITY POLICING HELPS POLICE/LAW ENFORCEMENT AGENCIES ENHANCE HOMELAND SECURITY

Community policing involves Police/other Law Enforcement Agencies/other Government Agencies proactively engaging with citizens to prevent potential crimes and gather intelligence. This approach complements homeland security initiatives by providing Police/other Law enforcement agencies with vital information to prevent terrorist activities and other threats. Private CCTV cameras in businesses and residential complexes offer a massive opportunity for law enforcement agencies to monitor vulnerable areas and gather intelligence. Several community policing initiatives have been launched globally to monitor these cameras and thereby enhance homeland security. In this context, if every citizen audits their own CCTV footage on a daily basis, it will greatly reduce policing burden and save governments huge amounts of funds.

USE OF VIDEO SURVEILLANCE TO ENHANCE HOMELAND SECURITY

Governments enforce the use of video surveillance to monitor the following:

- Borders (land and maritime borders)

- Ports of entry (airports and seaports)

- Critical infrastructure (government facilities, power and nuclear plants etc.)

- Public facilities

- Sensitive locations such as places of worship, schools and other educational institutions, healthcare facilities, banks etc.

- Businesses such as retail outlets, hotels, chemical and pharma companies, manufacturing facilities, and so on.

Further, each of the above facilities generally need to review and analyse recorded video footage from time to time for investigating incidents and/or accidents, and other issues in order to corroborate evidence. Also, to monitor border areas, remote /inaccessible locations where installing CCTV cameras is not feasible, as well as rallies/gatherings, drones are being used.

LIVE MONITORING – CHALLENGES

For each of the facilities mentioned in the previous topic, there is a dedicated control room with operators, set up for live monitoring of CCTV and other cameras such as drones. 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:

- Recces/suspicious movements/activities

- Patterns of enemy/intruder movement (especially at borders)

- Insider job/security lapses

- Unauthorized/unlawful activities/visitors

- Accidents/Causes of potential accidents

- Loss/theft

- Unclaimed/unattended objects

- Health and safety issues

- Instances of women and child abuse

- Intrusions, especially by animals

- Inattentive staff (e.g. guard sleeping)

- 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 incidents are reported in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of all stakeholders of homeland security initiatives.

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 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 officials on duty at an organization.

2. List of authorized security personnel deployed at an organization.

3. List of suspected terrorists or offenders likely to visit the premises of an organization (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.

HOMELAND SECURITY ENHANCED THROUGH CROWD SOURCED SURVEILLANCE AND COMMUNITY POLICING

COM-SUR encourages users of CCTV to audit their own CCTV video footage as a standard operating procedure. Regular auditing of CCTV by the public means that the Police/other Law Enforcement Agencies have more 'eyes' working for them. This enables the Police/other Law Enforcement Agencies in identifying potential threats and dangerous situations before they can occur.

Also, in case of a crime, if a standardized incident report is delivered to the Police/other Law Enforcement Agencies by the affected party in PowerPoint carrying the entire story (what, where, when, why, who, how, and the video clip), crime would get solved faster.

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!