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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
LUXURY SHIPS

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 surveillance is common in luxury ships, 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 LUXURY SHIPS

1. Passenger and crew safety:

Safety concerns encompass a range of issues, including onboard accidents, medical emergencies, and personal security.

2. Theft and robbery:

Luxury ships often carry valuable assets and personal belongings of passengers and crew. This makes them attractive targets for theft and robbery. Both external criminals and internal personnel may attempt to exploit vulnerabilities in security systems or take advantage of crowded areas to carry out their activities.

3. Crowd management:

Luxury ships carry a large number of passengers. Hence crowd management during embarkation, disembarkation, and in public areas is essential to prevent accidents, injuries, or panic situations.

4. Terrorism and piracy:

Luxury ships can be targets of terrorism or piracy, particularly in regions with a history of such incidents. Attacks may aim to disrupt operations, harm passengers or crew, or even hijack the ship.

5. Environmental concerns:

Luxury ships must also address environmental challenges and comply with international regulations to minimize their ecological impact. This includes preventing pollution from waste disposal, ensuring proper handling of hazardous materials, and implementing sustainable practices to reduce carbon emissions.

6. Fire safety:

Luxury ships face significant challenges when it comes to fire safety. With a large occupancy and limited escape routes, ensuring the safety of passengers and crew during a fire emergency is crucial. Compartmentalization and proper storage of flammable materials are essential, while electrical systems and kitchen areas require diligent maintenance and adherence to safety protocols.

7. Alcohol-related incidents:

Alcohol consumption is prevalent on luxury ships, with various bars, lounges, and entertainment venues offering alcoholic beverages to passengers. While the majority of passengers consume alcohol responsibly, there can be instances where excessive drinking or irresponsible behavior leads to incidents and challenges.

8. Insider threats:

Luxury ships 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 severely impacted the operations of luxury ships worldwide. Owing to travel restrictions/port closures, some had to suspend their operations. This resulted in significant financial challenges. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

USE OF VIDEO SURVEILLANCE AT LUXURY SHIPS

Most luxury ships have video surveillance covering the following areas:

- Entry and exit points
- Public areas such as lobbies, atriums, lounges, bars, restaurants, theaters, and recreational areas
- Cabin corridors
- Deck area

- Engine rooms and other critical infrastructure
- Elevators and elevator lobbies
- Other critical areas that house expensive equipment and other public access areas deemed important
- Parking areas

Further, the concerned stakeholders of luxury ships need to review and analyse recorded CCTV video footage from time to time for investigating incidents and accidents, fights, staff negligence etc., in order to corroborate evidence and avoid any potential lawsuits, as well as assisting police/law enforcement agencies.

LIVE MONITORING – CHALLENGES

Several luxury ships have a dedicated control room with operators, set up for live monitoring of CCTV 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:

- Passenger issues
- Accidents/Causes of potential accidents
- Potential causes of fires
- Housekeeping issues
- Recces/suspicious movements/activities
- Insider job/security lapses
- Unauthorized/unlawful activities/visitors
- Exceptions during VIP movements
- Compliance issues
- Health and safety issues.

- Fraud/loss/corruption/theft
- Unclaimed/unattended baggage/objects
- Human rights violations
- Staff negligence
- Inattentive staff (e.g. guard sleeping)
- Unruly passengers/staff
- 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 stakeholders of luxury ships report incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of all stakeholders.

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 officials on duty (who can be contacted in case of any emergency/grievance).
2. List of authorized security personnel deployed on the luxury ship.
3. List of habitual offenders/suspects likely to board the luxury ship (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!

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'.