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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
MALLS AND LARGE
SHOPPING CENTERS

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 at malls and large shopping centers 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 image 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 images, 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 MALLS AND LARGE SHOPPING CENTERS

1. Customer service issues:

Friendly and helpful customer service is crucial in creating a positive experience. Malls and large shopping centers need to ensure that their staff provides excellent customer service, assist customers with their inquiries, and address any concerns or issues promptly. Further, malls and shopping centers also need to ensure regular cleaning, proper sanitation, and prompt maintenance of facilities, restrooms, and common areas to create a pleasant and inviting atmosphere for shoppers.

2. Shrinkage and thefts:

Malls and large shopping centers constantly have to face the prospects of shrinkage and thefts which can be of various kinds such as taking cash from the register, too many invalid or voided transactions, shoplifting, or product slipping through the entrances or exits. Also, there is the possibility of theft occurring after business hours when no one is present.

3. Terrorism:

Malls and large shopping centers are susceptible to terrorism due to their symbolic value, high footfall, relative vulnerability, and potential economic impact. These factors make them attractive targets for terrorists seeking to cause mass casualties, generate fear, and disrupt society.

4. Robbery and burglary:

The presence of cash registers, ATMs, and jewelry stores in malls and large shopping centers makes them susceptible to robberies and burglaries.

5. Crowd control issues:

Malls and large shopping centers can become overcrowded, particularly during busy shopping periods or during events, and this can create safety hazards for shoppers and employees. Further, there are concerns about children being vulnerable to kidnapping.

6. Vandalism and property damage:

Malls and large shopping centers may experience acts of vandalism, such as graffiti, defacement of property, or destruction of public facilities. These incidents not only result in financial losses but can also create an environment of disorder and impact the overall aesthetic appeal of the mall or shopping center.

7. Public disturbances and disorderly conduct:

Malls and large shopping centers can experience incidents of public disturbances, unruly behavior, or disputes among visitors.

8. Safety hazards:

Malls and large shopping centers may have a

variety of safety hazards, such as wet floors, broken escalators, or uneven pavement.

9. Fire safety:

Malls and large shopping centers are susceptible to fire incidents due to the presence of multiple stores, electrical equipment, and high human traffic.

10. Parking lot security:

Parking lots are common areas for criminal activities, including vehicle theft, break-ins, and personal assaults.

11. Insider threats:

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

12. 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.

USE OF VIDEO SURVEILLANCE AT MALLS AND LARGE SHOPPING CENTERS

Most malls and large shopping centers have video surveillance covering the following areas:

- Entry and exit points
- Common areas, such as food courts and play areas
- Individual stores
- Parking areas
- Other areas deemed important

Further, the concerned stakeholders at malls and large shopping centers generally need to review and analyze recorded CCTV video footage from time to time in order to track possible offenders as well as reconstruct the chain of events that lead to a particular incident/accident/customer dispute as well as to assist police/law enforcement agencies. In some cases, the recorded CCTV video footage is also used for the purposes of training /onboarding employees on customer behavior.

REMOTE VIDEO AUDITING

Some malls and large shopping centers have begun to deploy third-party services of Remote Video Auditing (RVA) primarily for monitoring employee, customer, and supplier activities that impact customer satisfaction, operating efficiency, and profitability. This entails placement of cameras at relevant areas of the mall or shopping center's premises. Third-party video auditors go through recorded video feeds, looking for key performance indicators (KPIs), and accordingly report their audit findings to the management of the mall or shopping center for corrective and preventive action. It has been found that such video-based operational audits

have helped many retail establishments increase return on investment (RoI) and boost sales, revenues, and profit by finding theft and fraud they didn't know existed/went unreported.

LIVE MONITORING – CHALLENGES

Several malls and large shopping centers 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 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 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.

"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:

- Customer service issues
- Recces/suspicious movements /activities/shoplifting attempts
- Overcrowding
- Insider job/security lapses
- Unauthorized/unlawful activities/visitors
- Kidnapping/kidnapping attempts
- Violence and vandalism
- Customers wearing suspicious/seasonally inappropriate clothing, for example heavy coats

to conceal items

- Sweet hearting (employees giving away merchandise to a 'sweetheart' customer (such as a friend, family member or fellow employee) without invoicing the same
 - Accidents/Causes of potential accidents
 - Potential causes of fire
 - Housekeeping issues
 - Fraud/loss/corruption/theft
 - Unclaimed/unattended baggage/objects
 - Human rights violations
 - Staff negligence
 - Inattentive staff (e.g. guard sleeping)
 - Unruly customers/staff
 - Issues with female staff or customers
 - Compliance issues
 - Health and safety issues
 - Customer behavior/shopping preferences
 - 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 all malls and large shopping centers report incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of the retail sector.

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 at the mall or shopping center.
3. List of habitual offenders/suspects likely to visit the mall or shopping center'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.

NEW SKILL – 'CCTV VIDEO FOOTAGE AUDITOR'

In a groundbreaking move, the Ministry of Skill Development of India has established National Occupational Standards for the crucial skill of CCTV Video Footage Auditing. The Ministry of Education has also introduced a course to teach this skill to students in grades 11 and 12. This initiative will not only create new job opportunities and business ventures for those seeking a fresh career path but also for retirees from both the armed forces and the private sector. Additionally, this skill will help activate the millions of CCTV cameras currently underutilized, bringing them out of 'sleep mode' and enhancing their effectiveness.

AI WHERE YOU NEED IT, HI ALL THE TIME – THE AUGMENTED INTELLIGENCE MANTRA

The true power of COM-SUR lies in its ability to seamlessly integrate AI and Human Intelligence (HI) into a cohesive, Augmented Intelligence system. With COM-SUR, AI can be leveraged when needed to enhance analysis and generate insights, while HI remains at the core of the system's operation, ensuring that the technology is always accessible, intuitive, and responsive to human needs. This balance between AI and HI is what defines Augmented Intelligence, making COM-SUR a revolutionary tool that elevates the entire surveillance industry.

CONCLUSION

"You see, but you do not observe"—a famous quote by Sherlock Holmes in A Scandal in Bohemia (1891, by Sir Arthur Conan Doyle)—perfectly illustrates the need for human insight in surveillance. While computers can 'see,' it is human observation that truly interprets and

acts on what is seen. COM-SUR simplifies and enhances this critical process, leading to more effective and insightful results.

"Cameras don't lie"—but how will you know unless you 'see' what the cameras 'saw'? Don't wait for things to go wrong. Start auditing your CCTV footage with award-winning COM-SUR today.

In closing, we present three guiding principles that will revolutionize video surveillance:

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