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 CAMEL BARNS AND HIGH-VALUE CAMEL FACILITIES

WELCOME

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

CCTV and other forms of video surveillance are common in camel barns and high-value camel 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/ 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.

CHALLENGES FACED BY CAMEL BARNS AND HIGH-VALUE CAMEL FACILITIES

1. Animal welfare and health:

Ensuring the welfare (especially with respect to animal cruelty issues) and health of the camels is a significant challenge. Camel barns and high-value camel facilities need to protect the animals from diseases, accidents, extreme weather conditions, and other risks. Adequate veterinary care, regular monitoring, and implementing proper safety protocols are crucial to maintaining the well-being of the camels.

2. Unauthorized access:

One of the primary security threats is unauthorized access to the premises. Intruders may attempt to enter the facility to steal or harm the camels, disrupt operations, or cause damage.

3. Theft and vandalism:

Camel barns and high-value camel facilities may be targeted by thieves who aim to steal valuable camels, equipment, or other assets. Vandalism, such as damaging infrastructure or equipment, can also be a concern. Perpetrators often conduct pre-operational surveillance of the target area, making it important to detect suspicious activity during this phase to prevent an incident.

4. Natural disasters:

Camel barns and high-value camel facilities located in areas prone to natural disasters, such as floods, wildfires, or severe storms, face additional challenges. These facilities need to have emergency response plans, evacuation procedures, and resilient infrastructure to mitigate the risks associated with such events.

5. Biosecurity:

Camel barns and high-value camel facilities must implement biosecurity measures to prevent the introduction and spread of diseases among the camels. This includes implementing quarantine protocols, restricting access to outsiders, regular health check-ups, and maintaining strict hygiene practices within the facility.

6. Human safety:

The safety of staff, handlers, and visitors is paramount. Proper training on animal handling, implementing safety protocols, and providing personal protective equipment (PPE) are essential to prevent accidents and injuries.

7. Insider threats:

Camel barns and high-value camel facilities have to deal with insider threats from disgruntled employees or even unwitting staff who fail to follow proper security and safety measures.

8. 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 camel barns and high-value camel facilities worldwide. Owing to lockdowns/restrictions, the availability of veterinary services, feed supplies, and other essential resources were affected, thereby impacting the health and well-being of the camels. Further, the pandemic led to a decline in tourism, events, and other related industries, affecting the demand for camel-related activities such as camel rides, shows, and races. This had financial implications for camel barns and high-value facilities that relied on these revenue streams. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

USE OF VIDEO SURVEILLANCE AT CAMEL BARNS AND HIGH-VALUE CAMEL FACILITIES

Most camel barns and high-value camel facilities have video surveillance covering the following areas:

- Entry and exit points

- Stalls and pens housing the camels

- Feeding and watering areas

- Outdoor enclosures and pastures

- Veterinary facilities

- Storage areas

- Corridors and walkways

Further, the concerned stakeholders at camel barns and high-value camel facilities generally need to review and analyse recorded CCTV video footage from time to time for investigating incidents and/or accidents, and other issues in order to corroborate evidence as well as assist police/law enforcement agencies.

USE OF THERMAL CAMERAS

Thermal cameras use heat signatures to detect objects or individuals. Here are some instances where thermal cameras may be employed:

1. Animal Health Monitoring:

Thermal imaging allows for the detection of abnormal heat patterns in camels, which could indicate potential health issues such as inflammation, injury, or infection.
By monitoring the camels' thermal signatures, any changes or abnormalities can be identified

early on, enabling prompt veterinary intervention.

2. Security and Intrusion Detection:

Thermal cameras can be used to detect intruders or unauthorized individuals attempting to enter the facility. The thermal imaging capability allows for the identification of human heat signatures, even in dark or obscured environments, providing an added layer of security.

3. Fire Detection:

Thermal cameras are effective in detecting heat anomalies that may indicate a fire or overheating equipment within the facility. Early detection of such events can facilitate rapid response and help prevent potential damage or harm to the camels and infrastructure.

4. Environmental Monitoring:

Thermal cameras can assess temperature variations within the barn or facility, enabling the identification of areas with inadequate heating or cooling. This helps maintain a suitable environment for the camels, ensuring their comfort and well-being.

USE OF DRONES

Drones are increasingly being used to monitor camel barns and high-value camel facilities. Here are some ways drones are utilized:

1. Surveillance and security:

Drones equipped with cameras or thermal imaging capabilities are deployed for surveillance and security purposes. They can monitor the perimeter of the facility, identify

unauthorized access, and detect potential security threats or intruders.

2. Animal health and behavior monitoring:

Drones capture aerial footage of camels, enabling the monitoring of their health, behavior, and overall well-being. This allows for early detection of any signs of illness, injury, or abnormal behavior patterns.

3. Facility inspections:

Drones can conduct visual inspections of the facility's infrastructure, roofs, fences, and other critical components. This helps identify any maintenance or repair needs, ensuring the facility remains in good condition.

4. Environmental monitoring:

Aerial drones can assess the environmental conditions in and around the facility. They can capture data on temperature, humidity, vegetation health, or water sources, providing valuable insights for managing the camels' living conditions.

5. Emergency response:

Drones can be deployed during emergencies or natural disasters to assess the situation, locate missing animals, or provide situational awareness to emergency response teams.

LIVE MONITORING – CHALLENGES

Some camel barns and high-value camel facilities 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.

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:

- Animal welfare issues (which include animal cruelty)

- Biosecurity threats

- Occupational safety and health issues

- Operational issues

- Equipment malfunction/other technical issues

- Recces/suspicious movements/activities

- Staff negligence

- Insider job/security lapses

- Unauthorized/unlawful activities/visitors

- Fraud/loss/corruption/theft

- Housekeeping issues

- Violence and vandalism

- Intrusions, especially by animals

- Inattentive staff (e.g. guard sleeping)

- Unruly staff/visitors/outside workers /security guards

- Unclaimed/unattended objects

- Issues with female staff or visitors

- 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 camel barns and high-value camel facilities report incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of all camel barns and high-value camel facilities.

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 camel barn or high-value camel facility.

3. List of potential suspects/miscreants likely to visit the camel barn or high-value camel facility'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!