comsur™

the missing piece of CCTV

THE FOOTAGE WHISPERER

"SEE WHAT THE CAMERA SAW"

100+ TOPICS - AIRPORTS TO ZOOS

COM-SUR
the missing piece of CCTV

UTILITY VALUE OF COM-SUR™ FOR CANNABIS FARMS

WELCOME

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

CCTV and other forms of video surveillance are commonly used in cannabis farms, 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 CANNABIS FARMS

1. Theft and unauthorized access:

Cannabis farms are attractive targets for theft due to the high value of the crops. Unwanted individuals may attempt to gain unauthorized access to steal plants, harvested products, or equipment.

2. Vandalism and sabotage:

Cannabis farms may be subject to acts of vandalism or sabotage, where individuals intentionally damage crops, infrastructure, or equipment.

3. Compliance issues:

Cannabis farms are subject to stringent regulations and compliance requirements, which vary by jurisdiction. Meeting these requirements can be challenging and costly, as farms need to implement security systems, record-keeping protocols, and adhere to strict guidelines regarding cultivation, distribution, and waste management.

4. Product quality control:

Ensuring the quality and safety of the cannabis products is crucial, and surveillance can help identify any potential issues or deviations in the production process, meeting regulatory requirements, maintaining customer satisfaction, and building a reputable brand.

5. Environmental factors:

Cannabis farms are vulnerable to environmental challenges such as natural disasters, extreme weather conditions, pests, and diseases. These factors can damage crops, impact yields, and result in financial losses if not properly managed.

6. Staff safety:

Cannabis farms face safety risks for their staff, including potential encounters with criminals, exposure to hazardous materials, or accidents related to farm machinery and equipment.

7. Insider threats:

Cannabis farms 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 the operations of cannabis farms worldwide. Owing to restrictions/lockdowns, many farms experienced labor shortages, which led to challenges in cultivation. Further, there was a disruption in the supply chain leading to shortages of materials required for cultivation. The operations of dependent industries were also impacted, resulting in huge losses. Guidelines were issued to prevent the spread of COVID-19, but outbreaks still occurred.

USE OF VIDEO SURVEILLANCE AT CANNABIS FARMS

Most cannabis farms have video surveillance covering the following areas:

- Entry and exit points

- Cultivation areas

- Processing and manufacturing facilities

- Storage and inventory areas

- Perimeter and outdoor areas

The concerned stakeholders at cannabis farms generally need to review and analyze recorded CCTV video footage from time to time of their daily operations as well as incidents/accidents at their plants. This footage is also used for training employees in order to prevent future recurrences.

USE OF DRONES

Drones are increasingly used to monitor cannabis farms. Drones equipped with cameras or sensors provide aerial surveillance capabilities that offer unique advantages in the cultivation and security of cannabis crops. They can capture high-resolution imagery, detect potential issues such as pests or nutrient deficiencies, assess crop health, and monitor large areas efficiently. Drones also enhance security by providing real-time aerial surveillance, identifying unauthorized access or potential security breaches, and assisting in theft prevention.

REGULATIONS REGARDING VIDEO SURVEILLANCE FOR CANNABIS FARMS IN THE UNITED STATES

Regulations regarding video surveillance for cannabis farms in the United States vary by state, as cannabis laws and regulations are primarily governed at the state level. However, there are some regulations which are generally common across states. Here are two notable regulations:

1. Recording and storage:

Regulations typically require cannabis farms to

maintain continuous recording of video footage from their surveillance cameras. The specific retention periods for recorded footage may vary by state, but commonly range from 30 to 90 days. The purpose of this requirement is to allow regulatory agencies to access and review recorded footage if needed for investigations, audits, or compliance verification.

2. Compliance reporting:

Cannabis farms are required to provide compliance reports that include video evidence upon request. This ensures transparency and allows regulatory bodies to verify adherence to security and operational regulations.

LIVE MONITORING – CHALLENGES

Several cannabis farms have a dedicated control room with operators, set up for live monitoring of CCTV as well as 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 and image 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.

<u>"CCTV AND OTHER FORMS OF VIDEO SURVEILLANCE ARE NOT ENOUGH – WE MAKE IT WORK FOR YOU"</u>

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:

- Crop health and safety issues

- Biosecurity risks

- Compliance issues

- Staff health and safety issues

- Recces/suspicious movements /activities

- Vandalism

- Insider job/security lapses

- Unauthorized/unlawful activities/visitors

- Intrusions, especially by animals

- Accidents/Causes of potential accidents

- Equipment malfunction/tampering/other technical issues

- Fraud/loss/corruption/theft

- Staff negligence

- Inattentive staff (e.g. guard sleeping)

- Issues with female staff

- Cameras/recorder malfunctions

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

1) <u>AUDIT CCTV AND OTHER SURVEILLANCE VIDEO FOOTAGE DAILY AS A STANDARD OPERATING PROCEDURE</u>

'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) <u>DOCUMENT AUDIT FINDINGS/INCIDENTS</u>

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 cannabis farms report incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of the cannabis industry.

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 officials on duty at the cannabis farm.

2. List of authorized security personnel deployed at the cannabis farm.

3. List of habitual offenders/suspects likely to visit the cannabis farm (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!