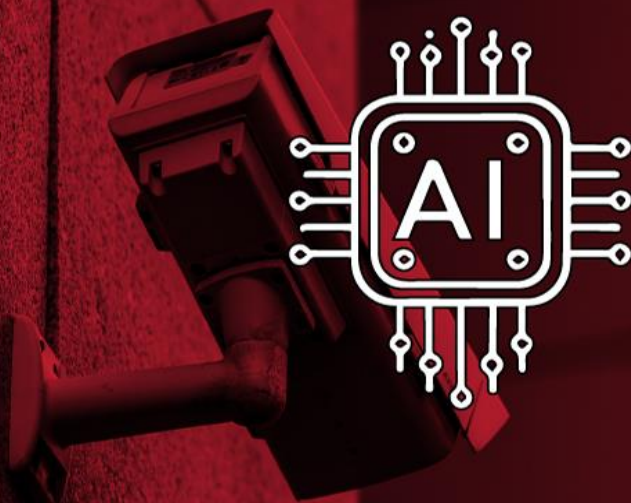




"SEE WHAT THE CAMERA SAW"

THE FOOTAGE WHISPERER



'BETTER' AI VIA DAILY AUDITS NO MORE DATA WALL

100+ TOPICS - AIRPORTS TO ZOOS

GAUTAM D. GORADIA



UTILITY VALUE OF
COM-SUR™ FOR
CASINOS

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 casinos 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.

BETTER AI VIA DAILY AUDITS – NO MORE DATA
WALL

COM-SUR delivers 'BETTER' AI by transforming how organizations approach CCTV video

surveillance, auditing, and post-event analysis. By generating a constant stream of real-time, site-specific data—Continuous Frontier Data—COM-SUR ensures that AI systems are never starved for fresh, actionable insights, which is key for building custom models and addressing key challenges like data exhaustion, data walls, and data cascades that often hinder AI from performing at full potential. A key to making AI more effective lies in continuous learning from real-world incidents through daily and post-event auditing. COM-SUR enables AI models to evolve based on audit findings and incidents that go beyond real-time detection. By auditing daily footage, capturing exceptions, and feeding this data back into AI models, COM-SUR significantly improves the accuracy of AI systems, helping to reduce false alarms and enhance detection capabilities. This continuous feedback loop ensures that AI learns from what might have been missed in real-time, making it smarter and more reliable over time. By integrating Reinforcement Learning from Human Feedback (RLHF) and Explainable AI (XAI), COM-SUR ensures that AI systems are continuously refined, transparent, responsible, and contextually aware. However, recognizing that AI can only perform tasks it's programmed for, human intelligence and intervention remain essential in verifying and refining AI outcomes. With COM-SUR, businesses can leverage AI as a powerful tool while maintaining human oversight, ensuring more accurate and informed decision-making—ultimately leading to 'BETTER' AI. This not only enhances surveillance but also paves the way for Augmented Intelligence, where AI-driven insights empower human operators while keeping them at the center of decision-making.

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 CASINOS

1. Theft and fraud:

Casinos need to protect their assets, including cash, chips, and other valuable items, from theft and fraud by employees and customers.

2. Cheating:

Casinos need to prevent customers from cheating by using various techniques, such as card counting, and collusion with other players.

3. Violence, vandalism, and abuse:

Casinos need to protect their customers and employees from violence and vandalism by ensuring that the premises are secure and that disputes are resolved peacefully. Casinos also need to address instances of sexual and other forms of abuse.

4. Crowd control and public safety:

Casinos often attract large crowds, which can lead to crowd management challenges and potential security incidents.

5. Compliance issues:

Casinos need to comply with various regulations related to security, surveillance, and reporting of suspicious activities.

6. Insider threats:

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

7. 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 CASINOS

Most casinos have video surveillance covering the following areas:

- Entry and exit points
- Gaming tables and machines
- Cash handling areas, such as cashiers and ATMs
- Bars and restaurants
- Parking lots
- Hotel rooms and hallways
- Back-of-house areas, such as staff offices and storage rooms

Further, casinos need to review CCTV footage in order to detect instances of cheating by players or employees, such as collusion between players or improper dealing by dealers, and so on.

VIDEO AUDITING TO ENSURE INTEGRITY AND FAIRNESS OF GAMES

Video auditing is a common practice in casinos to ensure the integrity and fairness of their games. It involves the use of video surveillance systems to monitor and record gameplay, allowing for later review and analysis by casino personnel, regulatory bodies, or independent auditors. Here's how video auditing is carried out in the context of casino games:

1. Game monitoring:

Cameras strategically placed around the gaming floor capture video footage of various casino games, such as blackjack, roulette, poker, and slot machines. The cameras record the gameplay, including the actions of players, dealers, and the handling of cards or chips.

2. Game review and analysis:

The recorded video footage is reviewed and analyzed to ensure compliance with gaming regulations, internal procedures, and fair gaming practices. This process involves examining the gameplay, dealer actions, and

player behavior for any signs of cheating, collusion, or other irregularities.

3. Dispute resolution:

In case of player disputes or discrepancies, video footage can be reviewed to determine the sequence of events and resolve conflicts. This helps in providing an accurate account of what transpired during the game and assists in making informed decisions regarding dispute resolution.

4. Compliance and regulatory requirements:

Video auditing plays a crucial role in meeting regulatory requirements set by gaming commissions and authorities. It helps ensure that casinos operate within the bounds of the law and adhere to established gaming standards.

5. Fraud prevention and detection:

Video auditing acts as a deterrent against fraudulent activities in casinos. By continuously monitoring gameplay, it helps identify potential scams, cheating techniques, or suspicious behavior exhibited by players or employees. This aids in preventing fraud and maintaining the integrity of the games.

6. Training and staff evaluation:

Video footage from casino games can be used for training purposes, allowing staff to review their performance, learn from mistakes, and improve their skills. It also enables management to evaluate dealer proficiency, customer service, and adherence to protocols.

LIVE MONITORING – CHALLENGES

Several casinos 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:

- Fraud/loss/cheating/theft
- Recces/suspicious movements/activities
- Customer safety issues
- Overcrowding
- Violence and vandalism
- Compliance issues
- Insider job/security lapses
- Unruly staff/customers
- Staff negligence
- Inattentive staff (e.g. guard sleeping)
- Housekeeping issues
- 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 the entire industry reports incidents in a standardized template, relevant authorities can derive business intelligence from the data and take action for the collective benefit of all casinos.

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 authorized staff.
2. List of authorized security guards deployed at the casino.
3. List of habitual offenders/suspects likely to visit the casino'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.

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'.