

Axis antes up casino surveillance.

Even strobe, LED and dim lighting can't deter Axis network cameras from their appointed tasks at the Hard Rock Hotel & Casino Tulsa.



Organization:
Hard Rock Hotel & Casino
Tulsa

Location:
Tulsa, Oklahoma, USA

Industry segment:
Casinos/Gaming

Application:
Asset and loss prevention,
security and safety

Axis partners:
Milestone, Agent Vi,
Sound Intelligence

Mission

From the twinkling LEDs on the gaming machines and the strobes and spotlights in the concert halls, to the dimly lit nightclub areas and neon signs in the bar, the ambience is designed to excite and entertain patrons looking for a good time. The constantly changing illumination had Hard Rock Hotel & Casino Tulsa looking for a better performing surveillance solution. The surveillance team wanted new network cameras capable of compensating for variable lighting and meeting the stringent regulations that govern all casino surveillance operations.

Solution

Hard Rock Hotel & Casino Tulsa turned to a portfolio of network cameras optimized for high performance in a wide range of challenging lighting environments. The surveillance department engineers systematically replaced the casino's legacy analog cameras and video management system (VMS) with an array of network fixed dome, pan/tilt/zoom (PTZ) and 360° field of view cameras controlled by a Milestone Xprotect® VMS.

The casino also took advantage of embedded video analytics from Agent Vi designed to alert surveillance staff to unauthorized intrusions and to speed up forensic investigations. The next system upgrade was to embed audio analytics from Sound Intelligence to detect aggression, gunshots and car alarms and instantly alert the surveillance team to investigate.

Result

Embedding the cameras with advanced analytics gives surveillance staff more time to spend on the casino floor protecting assets and ensuring the safety of guests and staff. The new surveillance system plays a major role in auditing, verifying supply deliveries, as well as helping to proactively identify possible fraud or misconduct.



Casino lighting compromised video clarity

Like many gaming venues, the lighting scheme at the Hard Rock Hotel & Casino Tulsa in Oklahoma focuses on creating an atmosphere of fun and excitement. While this works well for attracting patrons, it presented challenges for nearly 2,000 analog surveillance cameras trying to protect the property. With up to thousands of people enjoying more than 2,600 electronic games, 40 table games, a poker room and a concert venue on any given day, the casino realized it needed more advanced IP-based cameras specifically designed to cope with the challenges of a casino environment.

"Implementing a new system allows us to better meet the operational needs of the property," said John Underwood, Surveillance Technology Manager for the Hard Rock Hotel & Casino Tulsa. "Some of the bars and nightclub areas are very dimly lit. The concert and entertainment areas use strobes and spotlights during shows. Some of the gaming machines have LED lights that twinkle; some have really bright strobe lights on top. Our analog cameras were not giving us the clarity we wanted or expected with the advancement of technology."

The overhead lighting was washing out the video. In the parking lots, flashing emergency lights from first responders, vehicle headlights and exterior floodlights resulted in a blur.

Hard Rock Hotel & Casino Tulsa decided it was time to turn the tables on surveillance footage. The surveillance team began a secondary build out of network cameras capable of compensating for any lighting condition while delivering exceptionally high-quality recordings of every casino activity. When the new system was completely installed, they simply turned off the live view of the old system and began running the new one.

"We never had to shut anything down during the switchover," Underwood said. "And we have the flexibility to gradually remove the old cameras during off hours."

The house outsmarts scammers with cameras

Hard Rock Hotel & Casino Tulsa has had its fair share of people looking to make an easy buck. Thanks to the cameras, the venue is able to proactively and reactively respond to people displaying inappropriate behavior.

Network cameras in the cashier area deliver such clarity that it is easy to distinguish between bill denominations. In the parking lot, cameras help to provide evidentiary quality video even with ambulances and patrol cars flashing their lights. The auto-tracking and auto-touring options in many of the cameras provide added safety to staff and guests when the parking areas are less active.

In the food service areas, the casino uses network cameras to monitor safety and food preparations. The ultra-discreet fixed mini dome provides a 360-degree panoramic view. "Because of the wide field of view, we can use fewer cameras and still feel confident that we're able to document any type of misconduct or accident," noted Underwood. "It allows us to be proactive in any litigation that might arise."

Additional cameras in the warehouse are used to verify that the incoming palettes match the quantity of product listed on the bill of lading. Underwood's team installed the cameras in horizontal mode to monitor the dock doors and in corridor format to look down the warehouse racks where product is pulled and distributed to different departments.



“With as much activity as we have on the property, adding video and audio analytics to our Axis cameras has been essential to handling our surveillance workload. They help us focus on the important events and provide the evidence we need for prosecution and liability protection.”

John Underwood, Surveillance Technology Manager for Hard Rock Hotel & Casino Tulsa.

The casino also uses cameras in its food and beverage department, tying video to the live ticketing at the point of sale. “This helps us track whether employees are providing the right discount to guests or ringing up discounts they shouldn’t,” said Underwood. “It also shows us whether the product being delivered is actually what’s being rung up.”

In some instances, the casino also uses the cameras’ two-way audio capabilities to up the surveillance ante. One primary location is the cashier area where interactions with customers can be monitored for threats or misconduct.

Listening for potential problems

The casino recently embarked on a pilot program to augment its Axis cameras with audio analytics from Sound Intelligence to add another dimension to situational awareness – the ability to detect verbal aggression, gunshots and car alarms. The technology listens for specific acoustic characteristics such as voices raised in anger or an automatic weapon discharging. If that sound is detected, the analytics sends an immediate alert to the surveillance control room.

“Directly associating the audio detection alert with the camera allows us to take a quick look to see that everything is amiable and there’s nothing threatening or hostile going on,” said Underwood. “It lets us be a little more proactive without having to put more people on the floor to monitor every area fully.”

Because the technology only listens for sound patterns rather than speech, and only buffers a few seconds before and after the event for verification and forensic evidence, there’s no issue with violating federal and state privacy laws.

Performance testing for both aggression and gunshot detection went very well. “The results of the gunshot detection testing were better than expected with zero failures,” Underwood reported. “We will be incorporating it into our next capital budget.”

Insight over the entire operation

Hard Rock Hotel & Casino Tulsa has expanded its use of camera footage beyond safety and loss prevention. With the advent of video analytics such as heat mapping, the surveillance team is able to share valuable insights about prime real estate within the casino. “We can show the marketing department, gaming department or the food service teams where people are congregating most frequently and where foot traffic tends to bottleneck,” Underwood said.

Having hard data at their fingers allows the casino to make better-informed decisions about where to place new food venues or retail shops, or when to reconfigure floor layouts to ease congestion.

“The business intelligence they get out of the video helps them plan more objectively and more logically than they might otherwise have by just basing their decisions on a walk-through of the casino,” stated Underwood. “So they can use the information to help grow our overall business.”



AGENT 

 **milestone**

 **sound intelligence**

About Axis Communications

Axis enables a smarter and safer world by creating network solutions that provide insights for improving security and new ways of doing business. As the industry leader in network video, Axis offers products and services for video surveillance and analytics, access control, intercom and audio systems. Axis has more than 3,800 dedicated employees in over 50 countries and collaborates with partners worldwide to deliver customer solutions. Axis was founded in 1984 and has its headquarters in Lund, Sweden.

For more information about Axis, please visit our website www.axis.com