Facial recognition improves casino security.

A facial recognition system running on Axis cameras supports the work of physiognomists with gaming monitoring at Casino Gran Madrid-Colón.



Organization:

Casino Gran Madrid

Location:

Madrid, Spain

Industry segment:

Casinos/Gaming

Application:

Facial recognition

Axis partners:

Sensorvídeo, Herta Security

Mission

The work of physiognomists is critical to providing proper monitoring of casino gaming and, by extension, to overall casino security. Each day, it is necessary to identify, on average, somewhere between 5 and 25 individuals for any number of reasons. Reducing turnaround time for personal identification in the casino has been a frequent request of the security personnel and managers of such businesses for a number of years. Today, this demand can now be met – as a result of the use of facial recognition systems incorporating video analysis.

Solution

Traditionally, to establish concrete identification in a casino took considerable time while control center operators reviewed hours of recorded video. Based on the input of Sensorvideo, an Axis partner and company known for its experience in the casino industry, a facial recognition system by Herta Security was recommended that would make it possible to reduce the time normally required for this complex task.

Result

Currently the reliability rate of facial recognition systems based on video analysis is higher than 95%. As a result of the implementation of a system of this type, used to support the work of physiognomists, the amount of time it takes to identify someone in a casino has been reduced to less than half, even at short notice and on days of peak attendance.



"For many years we've wanted to implement a solution that would allow us to reduce the time it takes to identify someone in a casino. Thanks to advanced IP video technology augmented with facial recognition systems based on video analysis, this has now become a reality."

Ángel Pérez Alcarria, Director of Security, Gran Madrid Group.

Physiognomists play a critical role in casinos. In fact, until a relatively short while ago, it only required three parties to legally open a casino in Spain: a dealer, a cashier, and a physiognomist. They are, among other tasks, responsible for monitoring all gaming that takes place in a casino. Operations involving games with real money follow specific procedures defined down to the minutest detail. Non-adherence to these protocols can result in significant losses for the establishment. For example, a simple error in a chip count or accepting a late bet that results in a winner can create a serious economic problem.

According to the Madrid Casino Gaming Regulations, in order to gain entry to gaming parlors, you have to present identification such as a driver's license or equivalent. A casino's need for personal identification by physiognomists is essential. It is necessary to identify individuals not authorized for access, whether they have decided to put their name on the General Register of Gaming Access Bans or they were banned from gaming establishments pursuant to gaming regulations. There is also the need in this environment to identify the presence of VIP clients. Facial recognition technology has become a huge help in this respect with its ability to create multiple group lists.

Facial recognition is one of the least invasive biometric technologies, as the data capture is performed by camera and in general there is no direct interaction with the subject. Herta's BioSurveillance video surveillance solution detects multiple faces in real time enabling the management of subjects at any moment, and it also enables the facility to teach the system using direct video capture.

The system installed in Casino Gran Madrid-Colón consists of three AXIS Q1604 Networkd Cameras with capabilities specially designed for facial recognition, using wide dynamic range (WDR) technology that enables identification even under backlighting conditions or when bright light sources are in view. This server-based facial recognition system is fully integrated with the casino's video surveillance setup. From the control center it provides direct facial view of the last individuals to have accessed the establishment, the ability to perform guick searches, etc.

Subjects can be entered into the system via photographs and/or recorded video – or in real time – and it even works properly in cases when only a partial view of the face is available, on subjects wearing eyeglasses and hats, and on faces at moderate angles.

In the event that the security controls require follow-up – whether internally initiated based on observed behavior, or at the request of other departments – reviews are conducted in accordance with internal protocols in order to ensure maximum transparency and security in all operations.

Control of the gaming cameras is supervised by the physiognomists – who know the operation, rules, bets and payouts of every game and perform monitoring in order to ensure that everything is played out in accordance with the rules. In effect, their primary role is to assist the Gaming Department in reviewing recordings of the plays made at each gaming table, resolving any claims made by customers.















