

Biometrica *Visual Casino* helps the Stratosphere Hotel and Casino Protect Assets

Deployment of State-of-the-Art Identity Verification Solution
Reduces Losses by 90%, Saves \$500,000 every year

Turning Surveillance into a Profit Center

During an average day, the Stratosphere Hotel and Casino has thousands of patrons visit their casino floor, and even more on a busy night. While the traffic in the casino is great for business, monitoring the crowd for advantage players, cheats, and undesirables can be a daunting job. And the cost of not finding these individuals is unacceptable, given the estimate that half a million dollars of casino revenue is lost to grifters annually.

Recognizing the severity of this problem, Stratosphere management decided to take action and prevent further revenue loss. In order to make this goal a reality, the Stratosphere surveillance team would need to recognize these undesirable individuals before they walked out the door with their falsely obtained winnings. Biometrica's Visual Casino Suite was the answer. Using this technology, the Stratosphere database of unwanted, and the S.I.N. network, the Stratosphere cut their losses by 90%. The savings of nearly five hundred thousand dollars in prevented losses plus an estimated labor savings of \$44,000 represents a greater than 5000% return on their investment each year.

Value in Identifying Casino Patrons

Whether casino management is concerned with catching grifters in the act of cheating or identifying VIPs on the casino floor, casino surveillance teams are challenged to identify patrons in a timely manner, allowing the staff to respond appropriately. Timing of identification is the critical factor. However, the traditional technology employed at casinos does

not identify these individuals or work in a timely manner. Traditional means of identity verification are entirely manual, including surveillance staff scanning video feed from the casino floor and reviewing hardcopy files and stacks of video prints of known offenders to make potential matches. These photos were often faded or aged and of poor quality. These processes used to take hours of staff time and often caused casinos missed opportunities for making timely decisions about suspicious or valued patrons. But in recent years, many casinos have begun using the Visual Casino technology to enhance their identity verification solutions, cutting back on the manual processes and time needed to verify identities.

The Stratosphere Hotel and Casino is one such casino that has not only recognized the time saving benefits of this technology, but the return on investment value as well. The Stratosphere's partner in this effort has been Biometrica.

Identity Verification at the Stratosphere

If you ask Dirk Boss, Vice President of Surveillance at the Stratosphere, what is the most important principle in setting up an identity verification solution, he will tell you "set your parameters". Dirk did just that when he partnered with Biometrica to design the identity verification solution at the Stratosphere. He recognized the need to identify patrons in a timely manner, whether it be VIPs or individuals suspected of being casino undesirables, such as slot cheats, table game cheats, professional card counters or advantage play team members.

Biometrica helped in this endeavor by understanding the casino operations and providing tools for this solution,

namely the Biometrica Visual Casino suite.

The Visual Casino Suite includes:

- Face recognition application (FR)
- Surveillance Information Network (S.I.N.), a network of 160+ casino surveillance departments
- Industry information databases
- Local database enrollment module
- Video input module to capture images from any cameras and input the images into S.I.N alerts, local databases or into the FR system

Dirk immediately added the Visual Casino system to his patrolling operation. This allowed surveillance personnel to quickly and easily identify patrons that fit the parameter and begin investigating the identity. The local database enrollment module allowed the staff to quickly enroll the patron into the searchable databases and the Visual Casino face recognition module is used to scan for any matches to known advantage players, cheaters, undesirables, high-end players or substantial jackpot winners.

This module has been particularly useful when the Stratosphere surveillance staff has discovered the identity of patrons who have refused to provide names at the tables. In these cases the pit is notified that an advantage player is at the table, and that player is often removed. In other cases where the staff suspects advantage playing is taking place, but the casinos database shows no match for the identity, the S.I.N. module is employed.

Using this network of over 140 local, regional and other surveillance rooms, the Stratosphere can quickly send a digital image across the network and inquire about the individual's identity.

When a match is made, then once again the surveillance staff can take proper action.

In both cases the Visual Casino system greatly reduces the amount of time needed to confirm an identity. With the former system, it would have taken the Stratosphere hours to thumb through volumes of mug shots and 86 card files. Now the identity verification is done in seconds.

At the Stratosphere, the Visual Casino system is used every day. Staff uses the system several times during any given shift and it now takes about one tenth the time investigations took under the previous system. Further, changes between shifts have been made smoother through the deployment of this identity verification solution. The staff now takes notes on patrons that have already been reviewed, so the new shift does not duplicate the effort.

To date, the Visual Casino system at the Stratosphere has helped the staff

uncover cases of individual advantage players as well as team players. Since the system allows the operator to link individuals with their team associates, it's far easier for surveillance staff to identify these teams than ever before. For instance, if a card player is suspect, but there is no match in the database, the investigator can investigate their associates and within seconds possibly uncover the team play underway. Other catches at the casino have included shuffle trackers, card counters and gaming cheats.

Several stations are located throughout the surveillance room, so each surveillance operator has full use of the Visual Casino system, which reduces the time needed for research. Now when research is interrupted by unrelated phone calls, the investigator can pick up right where he/she left off.

Added Benefits

After the implementation of the Biometrica Visual casino Solution, the Stratosphere made it known that face

recognition technology had been deployed at the casino. The networks of advantage players quickly caught on and spread the word. This ultimately translated into an instant deterrence factor for the Stratosphere. Once the casino was associated with using face recognition technology, the Stratosphere dropped off the list of "recommended" casinos for advantage players. This factor alone has also saved the casino money, since several of these unwanted no longer frequent the casino.

Conclusion

In the past, the challenge of verifying the identities of casino patrons was a daunting task for surveillance personnel. A single investigation often took hours of an investigators time. With the deployment of Biometrica's Visual Casino suite, the Stratosphere has developed a state-of-the-art identity verification solution. Now within seconds investigators can verify identities by using their own databases as well as the S.I.N. module, linking them to over 140 casinos. This process has also made the identification of VIPs a more efficient process, allowing casino staff to deliver the required level of service. Further, the deterrence factor of using an identity verification solution powered by face recognition technology cannot be overlooked.

The key to the Stratosphere's success in deploying their Biometrica solution has been a straightforward formula:

- **Selecting the right application (Visual Casino Suite)**
- **+ Integrating the system with existing casino operations**
- **+ Setting your parameters**
- **= Reduced losses to undesirables, greater attention to VIPs, improved security for all patrons, and protected assets**
- **Up to 90% reduction in losses**

Player Tracking based on	Labor Time needed	Est. number per year	Total annual # of labor hours	Est .annual labor costs
Suspicion of Card Counters	45 minutes	1125 (1/10)	843.75	\$27,844
Suspicion of Table Cheating	45 minutes	562 (1/20)	421.5	\$13,910
Suspicion of Slot Cheating	45 minutes	65	48.75	\$1608
Returning Ex -Employees	20 minutes	6	2	\$66
Known Problem Gambling	N/A	N/A	N/A	N/A
Misc. Thieves & Scammers	45 minutes	216	162	\$5346
Fraud at Cage/Credit	20 minutes	12	4	\$132
				\$48,906
% that can be attributed to using Visual Casino system				90%
Est. annual labor savings attributable to using Visual Casino				\$44,015

Types of Undesirables Generating Losses that can be reduced by effectively using Visual Casino System	Cost of (1) incident	Est. number of these incidents per year	Total annual cost of each type of incident
High Action card counters	\$11,333	16	\$181,328
Mid Action card counters	\$8500	17	\$144,500
Lower Action card counters	\$5667	17	\$96,339
High Action table cheats	n/a*	n/a*	n/a*
Other table cheats	\$8500	7	\$59,500
Slot Cheats	\$8500	5	\$42,500
Ex-Employees (time)	\$11	6	\$66
Problem Gamblers	n/a	n/a	n/a
Misc. thieves and scammers (time)	\$24.75	216	\$5,346
Fraud at cage and credit	\$1500	12	\$18,000
		Total	\$547,579
% Loss Reduction that can be attributed to using Visual Casino Technology			90%
Est. annual value of prevented losses by using Visual Casino			\$492,821

SUMMARY:	
Est. annual labor savings attributable to using the Biometrica system	\$44,015.
Est. annual prevented losses attributable to using the Biometrica system	\$492,821.
TOTAL ANNUAL SAVINGS DUE TO USING BIOMETRICA	\$536,836.

Biometrica Las Vegas Office
 Biometrica Systems
 750 E. Warm Springs Rd Suite 240
 Las Vegas, Nevada 89119 USA
 Tel: +1 702.870.6949
 Fax: +1 702.873.8177
 info@biometrica.com
www.biometrica.com
 Biometrica Systems, LLC

The Stratosphere Hotel and Casino
 Industry: Gaming
 Web: www.stratospherehotel.com
 Products: Visual Casino Suite