

## Long-term, profitable decision.

Banco de Brasília S.A. weighed all the variables and decided to replace its analog CCTV with digital video surveillance in 100% of its branches.



**Organization:**  
Bank of Brasilia SA (BRB)

**Location:**  
Brazil

**Industry segment:**  
Banking/Finance

**Application:**  
Safety and security

**Axis partners:**  
Arcade Projetos  
Construções e Montagens,  
Digifort

### Mission

The banking sector has always been more conservative regarding the adoption of IP video surveillance. Some professionals from the financial industry are historically reluctant to open their networks to more devices. In addition, with a large number of old analog cameras, some managers tend to simply compare the initial cost of one analog camera versus IP. This rationale overlooks other factors, such as maintenance costs or even losses due to images that were not useful for investigations.

Banco de Brasília S.A. (BRB) has been a pioneer in Brazil when it comes to thinking outside the box. In 2010, the financial institution did an analysis that led it to completely abandon its analog system and adopt Axis digital technology in all its 127 branches, spread across the country.

### Solution

The advantages of IP technology, which did not significantly alter the proposed initial budget, led BRB to invest in a project consisting of AXIS M3202, AXIS M3204 and AXIS P1343 Network Cameras, along with other models.

In all, the project involved 1,153 cameras managed by Digifort software. In 2015, BRB decided to expand and update its cameras. The competitive tender procedure was won by a system integrator called Arcade, again involving hundreds of cameras. This time the project used AXIS M3037-PVE panoramic units, which are capable of replacing two or three existing cameras, depending on the layout of the bank branch. The new phase also added Zipstream compression technology and video analytics.

### Result

BRB became the first bank in Brazil to use digital video surveillance in 100% of its installations. This modernization gave scalability and openness to a system that is now ready for expansion, integration, and migrations. Maintenance costs dropped substantially. After being installed in 2011, the earlier Axis cameras were reallocated and remain in use, since only five of the 1,153 initial cameras presented issues over their first 5 years of service.



## A good deal

BRB's initial plan was to renovate its analog park. The director of Arcade, Milton Fernandes Balieiro Júnior, was on hand throughout the whole negotiation process. "We participated in the feasibility study for the client's budget for an analog retrofit of its existing system." The benefits of IP, added to the fact that the project's cost would not increase compared to the original budget, led Banco de Brasília to make an investment in innovation, becoming the first bank in Brazil to be 100% monitored by IP technology.

"We presented a study showing that for an investment 15% higher than the cost of buying analog cameras, the bank would achieve a higher level of security, with analytics and better image quality," explains Balieiro. At the end of the bidding process, the price ended up being equivalent to the initial budget.

The project included 127 branches in Brazil: 120 in the Federal District and 7 in the state capitals of Rio de Janeiro, São Paulo, Mato Grosso, Mato Grosso do Sul, and Goiás. The implementation process took about two months, deploying AXIS M3202, AXIS M3204, AXIS P1333, and AXIS P1343 Network Camera models. When robbers detonated an explosive in one branch and part of the roof collapsed, the AXIS M32 camera continued to record the events without any interruption.

On more than one occasion, the images helped the bank map out new types of robberies. "Criminals are creative, but high-resolution images have already led us to understand how these new robberies were being carried out. Based on these observations, we began to study the days and times when they typically occurred, and we were able to help the police in arresting suspects. The images helped bring down the gang," Deivison Nery, senior security analyst at BRB, explained.

Axis network solutions also helped the institution solve an unspoken challenge at the time: the communication link had no image transmission capability. "With IP, the H.264 compression protocol has delivered outstanding performance gains without losing image quality. We managed to meet the budget with an IP project that fulfilled the needs at that time," recalls Balieiro.

The images captured at all agencies are managed by Digifort software and recorded individually by each branch. They can be accessed from a control room that can put together a lineup of suspects, or even send them directly to the police.

### Continuous investment

After a few years of use, the bank's profitable experience with IP video surveillance and its concern with maintaining a high level of security at its branches led BRB to update the technology platform with cameras offering WDR, including Forensic Capture. They also took more advantages of H.264 compression with Axis Zipstream technology.

"We chose to stick with Axis in order to standardize our cameras, since they had proven to be robust and with optimal performance," said Deivison Nery, Senior Security Analyst at BRB. From 2011 to 2016, only 5 of the 1,153 cameras experienced problems—and even then, it was merely due to infiltration in the lining.

For the new phase, the bank purchased AXIS P3224 cameras (which were updated to the AXIS P3225-LVE model by the integrator, at no additional cost), along with AXIS P3224-LVE and AXIS M3037-PVE. AXIS Q1615 models were installed behind revolving doors at branches, capturing images of every customer who walks in. "Every customer passes through there, and we can see their faces very clearly because the camera has WDR and automatically corrects for differences in light levels," explains Balieiro.





AXIS M3037-PVE fisheye cameras are now responsible for covering an area that was previously monitored by two or three ambient cameras in the first phase. The older Axis cameras, in turn, have been reallocated to other areas in each branch, especially to provide a view of shadowy areas.

Outside the building, the AXIS P3225-LVE model is used both to cover areas subject to vandalism and to prevent damage—from graffiti to attempts to use explosives on ATMs.

In addition, the company was able to reduce maintenance costs and bandwidth consumption through developments in the Zipstream compression protocol, which on average reduces bandwidth and storage requirements by 50% or more.

The BRB Area Manager also lists other enhancements from the same technology: "We've had a decrease in downtime on the CCTV system and reduction in recording time for the central server. This has allowed us to increase the efficiency of our Monitoring Center and speed up the analysis of crises and incidents."

## Long term

One of the project's innovations involves the ability to open up branches remotely. When a bank employee comes in in the morning, he puts his card up to a reader for identification. Then he puts a finger up to the biometric reader as a double validation. At this point, an operator at the Monitoring Central checks visually whether everything looks ok or whether the employee is being coerced. If everything is normal, the operator clicks a button and the branch opens up. At the end of the day, the branch manager does the check out to log his or her departure, and the day's entire operation is logged on the system for investigative purposes.

Another development in the project is the installation of IP loudspeakers in branches for security purposes. Ten minutes before the branch closes, customers hear a pre-recorded message. And five minutes before closing, another message warns them to finalize their transactions. Should any customer remain in the branch after its automatic closing, the operator receives an alert at the monitoring center and would view the person on the cameras. They can then use their IP phone to give the customer real-time instructions on how to exit the building.

"We are making advances in how we control the opening and closing of our branches; we're migrating from using keys toward remote and monitored opening, which gives our employees greater security, reduces the risk of robbery attempts, and mitigates the risk of unauthorized entry," says Fabiano Cypriano do Nascimento, BRB Area Manager.

**"The partnership with Axis, through its representatives, was one of the cornerstones that allowed the project to succeed. Our video surveillance system functions at a very high level compared to other financial institutions, especially those that still insist on using analog and hybrid camera models."**

Deivison Nery and Fabiano Cypriano, Security Area for BRB Banco de Brasília S.A.



**BRB**  
BANCO DE BRASÍLIA

**Arcade**  
TECNOLOGIA

**digifort**

# About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the market leader in network video, Axis is driving the industry by continually launching innovative network products based on an open platform - delivering high value to customers through a global partner network. Axis has long-term relationships with partners and provides them with knowledge and ground-breaking network products in existing and new markets.

Axis has more than 2,600 dedicated employees in more than 50 countries around the world, supported by a global network of over 90,000 partners. Founded in 1984, Axis is a Sweden-based company listed on NASDAQ Stockholm under the ticker AXIS.

For more information about Axis, please visit our website [www.axis.com](http://www.axis.com).