

Shoplifters in focus: Edeka supermarket bets on IP video cameras.

Use of Axis cameras drops Edeka's inventory shrinkage to near zero.



Organization:

Edeka

Location:

Nienburg, Germany

Industry segment:

Retail

Application:

Safety and security

Axis partners:

SichTel – Sicherheitstechnik
& Telekommunikation
GmbH, NETAVIS Software
GmbH

Mission

Unusually high inventory discrepancies led the management of Edeka's branch in Lustfeld to a decision – to implement video surveillance at their new market in Nienburg. André Hanekamp, general manager at Edeka Lustfeld, wanted to stop the high theft rate and at the same time benefit from the advantages of IP video technology. Because the market needed blanket surveillance, special camera technology requirements arose for each department. Besides comprehensive monitoring, intelligent functions were also needed such as counter-directional recognition for the open entrance area.

Solution

Security specialist SichTel recommended Edeka adopt various types of IP cameras from Axis for use on the sales floor, for monitoring checkout areas and store-rooms, and even for surveillance outside the store. The video management and analysis software comes from NETAVIS Software GmbH.

Result

The Axis cameras monitor the Edeka store's entire premises. Some of the IP cameras can monitor two aisles at the same time and penetrate deep into them, so half as many cameras were needed compared to analog systems. Now police can identify three-quarters of the thieves thanks to the monitoring system's high-resolution images. Inventory shrinkage has decreased to 0.01 percent, and the market can do without additional antitheft devices.

Photo credit : beta-web/Schmitz



High inventory shrinkage rates call for a modern security system

General manager André Hanekamp manages a total of four Edeka markets, in Nienburg, Neustadt am Rübenberge (2) and Rehburg, which range in size from 1,100 to 2,600 square meters. The store in Nienburg is the first with IP video technology. Before moving into a new building in 2013, this branch had no video surveillance system at all, and despite frequent efforts by detectives, had unusually high inventory discrepancies up to 1.5 percent. Up to that time, the other three branches had worked with analog video solutions and saw loss rates of 0.04% to 0.5%.

Thieves work in a variety of ways. One of the most common methods is to remove goods from their packaging or tear off the price tags. Anyone who thinks that only outside thieves cause inventory discrepancies is wrong. Generally, retailers also have to deal with criminal behavior by insiders. An example of this would be "friendship purchases" or "sweet-hearting", where the cashier doesn't pass every item over the scanner. Many employees also issue themselves bottle return receipts and then cash them in.

As a result, the head of the Lustfeld branch chose an intelligent, IP-based video surveillance system for the new premises, instead of the analog cameras the other branches had. A decisive factor was a range of advantages, such as far better image quality, greater scalability and remote access. And a good price/performance ratio didn't hurt.

Blanket monitoring of the entire 2,600-square-meter market poses challenges, because different areas — such as the entrance, the loading dock and the aisles — place different demands on the cameras. Even the market's bakery (open Sundays) is included in the monitoring. The very open entrance area has no turnstile and is especially problematic, because here customers can leave the store unnoticed with goods they haven't paid for.

Other cameras cover the parking lot and the surrounding area. This deters graffiti artists for example, and also reduces accumulation of trash. A clean, orderly environment considerably lowers the risk of theft and burglary.

Axis cameras for any need, anywhere

For the full surveillance system, long-time Axis partner SichTel recommended various types of Axis cameras.

The covered loading dock's lighting conditions are difficult for video surveillance due to very dark areas, sometimes with strong oncoming light. Here, SichTel installed an AXIS Q1614 Network Camera, which delivers extremely detailed HDTV-quality images in dynamic lighting conditions. The camera works with Lightfinder technology to ensure that no part of the image comes back too bright or too dark. It also allows manual fine-tuning for especially high-contrast images or complex scenes.

The lighting conditions inside the market itself are very uniform so that a total of 39 AXIS M3005-V Network Cameras can monitor the whole interior. The cameras are protected with impact detection that sends an alarm to the employees in the event of vandalism. The 118° horizontal viewing range offers optimal capture of aisles and hallways.

The area outside the Edeka market is covered by three AXIS P1354-E Network Cameras with a robust design and movement recognition. These monitor the employee exits and offer protection when leaving the market. The checkout area uses four AXIS M3204 Network Cameras. They are especially unobtrusive, tamperproof and protected against vandalism.



Photo credit : beta-web/Schmitz



Used with appropriate partner applications, the Axis camera system can be expanded with additional analysis capabilities. These include recording customer frequency and paths to check effectiveness of secondary placements. Moreover, the entire solution can be completely integrated into existing systems, such as access control, locking systems or merchandise protection.

All of the cameras mentioned above offer network access for image evaluation. Edeka performs evaluation only in specific cases of suspicion and is planning future use of remote access with external entry if current data protection concerns are resolved.

Inventory shrinkage almost zero thanks to IP technology

Because the Axis cameras have a widened viewing angle for monitoring two aisles at the same time, and can see deep into the aisles, only 47 cameras with full HD resolution were needed. To get the same coverage with analog cameras, almost double the number would be needed – 90 units.

Moreover, the Axis frees up employees' movement because they don't need to keep an eye on the monitors all the time. If an alarm is triggered, the camera sends an image or a video frequency as a text message to a mobile phone.

Most crimes are discovered after the fact, such as when packages are torn open. This happens especially in the area of the coffee stand. Now police can identify three-quarters of the thieves, thanks to the high-resolution images. This revealed that about 90% of solved cases of theft were committed by regular customers. Inventory shrinkage has decreased to 0.01%, and the market can now do without additional anti-theft devices. Even high-priced liquor is now freely accessible, and the store detective now comes only once a week. For general manager André Hanekamp and his team, the strategy of using the latest IP video technology has been a complete success.

“We have thoroughly informed our employees on the use and operation of the Axis IP cameras. There were no misgivings. On the contrary: Employees reacted very positively, because they all knew that the theft rate was very high at our old location, where no modern IP video technology was used.”

André Hanekamp, general manager at Edeka Lustfeld.



About Axis Communications

Axis offers intelligent security solutions that enable a smarter, safer world. As the global 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 1,800 dedicated employees in more than 40 countries around the world, supported by a network of over 70,000 partners across 179 countries. 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.