

## IP video improves customer management in a service station. Flexibility and innovation when it comes to implementing a prepayment system based on license plate recognition.



Organization:  
Olea SA

Location:  
Zamudio, Biskaia, Spain

Industry segment:  
Retail

Application:  
Loss prevention, safety  
and security, license  
plate recognition

Axis partner:  
Netcamara

### Mission

The service station market has traditionally been characterized as highly regulated, dominated by a few multinational companies, and offering very low profit margins. Under these conditions, owning a service station means facing a number of decisions related to managing the business, which is also exposed to a number of significant risks.

One of the most worrisome decisions nowadays is how to implement prepaid services. On the one hand, it seems interesting, since it requires fewer resources to run the business, but on the other, the associated decline in sales because the customer cannot fill up right away can lead to losses of up to 15% in sales per customer.

### Solution

In order to provide a flexible solution that would enhance security and allow regular customers to refuel their vehicles without having to prepay, the company Olea contacted Netcamara, an Axis Application Development Partner. Olea proposed a solution based on IP video cameras and a Netcamara application module specifically designed for service stations and based on license plate

### Result

The new IP video system has eliminated "drive-off" losses from individuals who refuel and leave without paying, and has also allowed the company to create a dual system in which regular customers can refuel their vehicles without having to prepay; the system only applies to those who are not regular customers.

"One of the aspects that really convinced us was that the system allows us to apply any loyalty program without printing any type of card, because it automatically applies the discounts simply by recognizing the vehicle license plate. The versatility of IP video has allowed us to satisfy more of our needs with a single system."

Alberto Contreras, Olea S.A. Manager.

Olea S.A. is a company that has been in the service station market since the 1980s. Over the past thirty years, this company has always strived to innovate and seek to offer the best possible quality/price ratio to its customers. Over this time, it has experimented with multiple solutions to make itself more marketable to customers and increase customer loyalty, from funding the Bizkaia Motocross Championship and participating in the creation of a truck cooperative headquartered at the service station, to acquiring certain adjacent parcels of land to add several car wash stations and increase its range of services.

Because it was experiencing robberies, the company decided to install an analog video surveillance system in order to have some control over what was happening at the service station at night. However, this system never offered the level of image quality expected and they decided not to use it. During the computerization stage, they began looking for solutions to manage the service station's back office, and contacted Avalon Informática. This company installed the service station's first solution in the late 1990s.

Two years ago they began to notice an increasing number of "drive-offs"—that is, people who fill their tank and leave without paying. In order to provide a definitive solution to these security needs that would also allow them to establish a pre- and post-sale payment system, as well as to integrate this platform with the Avalon software, Olea S.A. management contacted Netcamara, an Axis Communications ADP. Netcamara proposed a vehicle management system based on license plate recognition.

The system installed consists of 12 cameras, of which 7 are AXIS P1346-E and AXIS M1113-E models. These cameras cover the exterior areas of the service station. They also have 2 AXIS M3005-V Network Cameras in the office, and 3 AXIS M1113 Network Cameras for inside the store. All the cameras are managed using Netcamara software.

Operating the system is simple: when a vehicle arrives at the service station, the cameras recognize the license plate and cross-check it against the database that the system automatically creates. In the case where the requirements set by management are met (which, in this case, is that they have previously filled-up X number of times, where X is a user-configurable parameter) on the screens of the exterior area of the service station, the captured license plate image is shown, and, with it, a picture of a traffic light—in this case, a green light. This means that the customer is a "regular" and the pump unlocks to allow the vehicle to refuel without prepayment. If this requirement is not met, the light shown is red. This means the customer must come to the office to pay before refueling. The system also allows license plates to be entered by hand on either of the two lists.

The system has been up and running since November 2012, and today the database contains over 11,000 license plate records. It has managed to reduce the number of "drive-offs" to zero in recent months. The owner is very satisfied because it has also allowed the service station to establish this system for identifying regular customers, which successfully reduces the 15% per-customer loss associated with implementing pre-paid systems.

