



CASE STUDY

Fit for the future: Smart store equipped with electronic shelf labels

Q1 Energie AG is building the company's first smart store - a supermarket that does not require sales staff, offers round-the-clock opening hours and simplifies payments for customers. Panasonic was responsible for the installation of the electronic shelf labels.

Client: Q1 Energie AG

Location: Osnabrück

Product(s) supplied: **Electronic Shelf Labels**

In the city of Osnabrück, a small piece of the future is being created for the convenience shop market. This market, which has not yet become widespread in Germany, offers snacks for between meals and also a small assortment of everyday foods. Fittingly, Q1 is testing its first own "Smart Store" in the city's Science Park. With 230 petrol stations, Q1 is one of the largest medium-sized petrol station operators in Germany. The store concept is intended to help the company maintain and expand this position. Jörg Bleydorn, Head of Convenience Retail at Q1, justifies the decision for the pilot test, which is currently taking place in Osnabrück, with a reference to staff shortages, which are increasingly being felt across the entire labour market.

"We are aware that the petrol station business will undergo major changes. We want to actively shape the inevitable change in the sector."

Jörg Bleydorn

Head of Convenience Retail

Q1

Q1 is sending a clear signal: The goal is to develop a smart store that meets the needs of today, and also into the future. And therefore offers 24/7 availability, giving customers the opportunity to get quick and easy access at any time and to leave the shop just as easily without queuing at a checkout. The focus is on the customer's shopping experience, which should be "convenient, cashless and round-the-clock".



The project was realised in a short space of time: almost exactly one year passed between the first exploratory talks and the official opening, including all necessary structural and administrative measures. In addition to Kesseböhmer, a well-known company in the shopfitting industry, Autonomo, a full-service provider of hardware and software for precisely these types of shops, and Panasonic were brought on board as partners for connecting the electronic shelf labels and installing them in the shop.

The smart store is now housed in a container. Covering a space measuring 9 by 3 metres, the shop offers sufficient sales space for about 300 items as well as a storage and technical room. Payment is made with the Q1 Shop & Go app, which is activated with a QR code scanner at the entrance. Alternatively, customers can use a debit or credit card that is read into a card reader. The site was developed directly in the heart of the Osnabrück Science Park with the support of the Economic Development Agency. The choice of site was deliberate. "The location is ideal for our test," underlines Bleydorn and continues: "The science park is dominated by many office buildings that do not have their own food outlets or canteens. The university has some buildings there and a small, young residential area has been created in the surrounding area." These are all factors that suggest you are dealing with tech-savvy people – who are open to a new shopping experience and also have a need that is otherwise difficult or impossible to meet. Among other things, this is due to the staffing levels that would have to be achieved for a small supermarket.

This also explains the wide assortment of about 300 products. It builds on the experience of petrol stations, including the need for food and hygiene. "But we also have coffee and superfresh food on offer, so freshly made sandwiches or salads," says Bleydorn. And he hints that the range will be expanded even further. Another point where the use of electronic shelf labels will be beneficial.



Electronic shelf labels – for direct interaction with customers

The requirements for electronic shelf labels in a smart store are no different than in a regular store – but ESLs give customers more information in a store that does not require staff. For example, additional information is imported from the POS system centrally and delivered locally.

Jens-Michael Pohl, Head of Field Engineering at Panasonic, explains: "The integration is different because we are integrating with a cloud service – and not with a customer server or an on-premise system. Communication only occurs from cloud to cloud, which makes it easier to scale in the future – it also makes the hardware cheaper because the resources in the cloud are divided between several locations." Jörg Bleydorn also justifies his decision to choose Panasonic for service and consultancy: "Because we had the feeling that we had found a partner who actively advises us and whom we can trust."

As James Sutherland, CEO of technology partner Autonomo, explains: "We have developed a dynamic pricing model. This would allow us to adjust prices depending on the time of day or weather to maximise the sales or the shopping basket. An ESL installation has to be able to cope with this reliably so that a customer can actually benefit from it." The company knows what it is talking about: they have set up over 1,000 autonomous shops worldwide, 250 in Europe alone. In front of petrol stations, supermarkets, stadiums, factories with 24-shift operation or canteens.

An initial conclusion?

More sales, lower costs, higher margins? These are certainly exciting corporate goals, but these were not the focus of the pilot in Osnabrück. "We want to see whether we can master the processes outside of a petrol station shop, so product placement, daily service at the coffee machine or filling the shelf space," explains Bleydorn. The first results will be presented in mid-May. As Mr Bleydorn emphasises: "We have gained important experience, which we now going to evaluate, and will present the first results in a presentation at the Uniti Expo."

