



CASE STUDY

Bus Ticketing Solution at BLT Baselland Transport EN

Client: BLT Baselland Transport AG

Location: Oberwil, Schweiz

Challenge

Robust ticketing system for daily use that has the lowest possible failure rate and low maintenance expenditure

Solution

Panasonic TOUGHBOOK Tablet and vehicle docking for running the customer's internally developed software

BLT Baselland Transport AG (BLT) is a Swiss regional public transportation company. BLT developed its own bus ticketing software with Panasonic TOUGHBOOK devices as the hardware.

"Panasonic in particular boasts an outstanding reputation in this area."

Daniel Schultheiss-Polasek
System Design project manager at BLT



Three million kilometres without a scratch

BLT Baselland Transport AG (BLT) is a Swiss regional public transportation company that operates a fleet of 63 buses, 101 trams and 17 trains. Time delays are just not acceptable – particularly when it comes to issuing tickets. To improve the efficiency of bus operations, BLT developed its own ticketing system and brought on board Panasonic and its rugged TOUGHBOOK tablets as the transportation company's hardware partner.

About 11.1 million riders used BLT buses as public transportation in 2018. Because of sales obligations, BLT has to provide a cash ticketing option at every bus stop – an option riders continue to use frequently, even in the age of smartphone apps.

Back in 2015, BLT had the idea of replacing old ticketing equipment with its own ticketing solution. After reviewing numerous external offers, the project team decided to adapt the existing ticketing app software together with partners and to purchase the hardware from an external provider.

A tailored solution

Conventional point-of-sale (POS) systems for bus operations are usually provided by manufacturers from the bus-operating sector. They deliver these systems as part of a complete package that includes the computer-aided operating control system. This system provides the driver, rider and operations control centre with operational information.

The BLT project team wanted to decouple the different requirements associated with ticketing and bus operations. A ticketing delay isn't pretty, but it's also not a disaster. Operational problems, on the other hand, threaten punctuality. Ticketing is now handled by the new, permanently installed ticketing devices C-POS which consist of the 10.1" TOUGHBOOK tablets and vehicle docking, a cassette for changing money and a ticket printer.

Tough demands on the hardware

BLT's requirements called for devices that would be as maintenance-free as possible and, in particular, tough and durable. The tablets also had to be permanently installed in the buses. Altogether the buses cover a distance of 3.57 million kilometres each year, and the ticketing system had to be rugged enough to meet these demands. Another essential requirement was for the tablet to have Android as its operating system as BLT wanted to continue developing its award-winning app "Tickets" for bus ticketing.

"In terms of the hardware, we concluded there are very few alternatives that meet our specific needs, and Panasonic in particular boasts an outstanding reputation in this area," states Daniel Schultheiss-Polasek, System Design project manager at BLT. This is why BLT purchased 75 tablets with a five-year maintenance agreement through the sales partner Mobit.

Additional partners included the app developer Netcetera and Nomasis, who delivered the mobile device management (MDM) system.

The ideal hardware reduces costs and effort

Besides the Android operating system, good GPS reception was also important as the existing bus stops would have to be automatically localised for ticketing. "Panasonic's GPS module is so powerful we could forego the GPS antennae on the roof of the bus," Schultheiss-Polasek explains. "This saves money and avoids installation costs that would be incurred from installing the antennae."

Essentially this project was about finding a system that had the lowest possible failure rates, maintenance expenditure and service level agreement (SLA) costs. The Panasonic TOUGHBOOK meets these challenges. In comparison with the previous system, the external operating costs for the internally developed solution are much lower, and it was also possible to significantly reduce maintenance expenditure.

The good collaboration between the project team and the partners involved as well as the stability of the overall system significantly contributed to being able to efficiently and successfully conclude the transfer to the new ticketing system for approximately 180 bus drivers and BLT employees.