

Reference Case Swiss Federal Railways

BATS: Switzerland buys its tickets by touchscreen



In a country with seven and a half million inhabitants, the Swiss Federal Railways (SBB) transports 833,000 passengers a day on a total of 4700 trains. The frequency of trains, variety of routes, rolling stock and punctuality are all top notch.

For SBB customers, the efficiency and comfort of their journey begins long before they board the train. Because SBB applies the same high standards on travel advice and ticketing as it does on its actual transport operations. An excellent example is the “BATS” (Billett-Automat mit Touch-Screen) ticket-vending machine (TVM) with touchscreen from ACS¹. This user-

friendly machine is regarded as one of the most progressive systems around. In Spring 2003, SBB ordered another 384 machines to add to its existing installed base of 675 TVMs.

Innovative solution with touchscreen

“Ascom (now ACS) offered the best price-performance ratio,” says Jürg Spaeti. The BATS system was selected despite some reservations with regard to customer acceptance of touchscreen technology. A public survey was subsequently conducted in conjunction with the Swiss Federal Institute of Technology, with surprising results. It showed that the touch-

Facts & Figures

- 1059 BATS TVMs in total, including a follow-up order of 384 machines in Spring 2003
- Maintenance and servicing contract for the BATS system
- Ongoing technical upgrades for existing machines
- Total investment of CHF 60 million (approx. EUR 40 million)

Customer

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screen enjoys an unexpectedly high level of public acceptance, even among the older generation. On the strength of these results and as a pioneer in public transport, SBB decided to introduce touchscreen TVMs as a standard solution.

Almost 100 percent availability

The greatest strength of the BATS system is its outstandingly high availability: the average on-line availability is 98 percent. All 675 BATS machines installed by the summer of 2003 are networked to a central server. At the same time, 95 percent of the relevant fare and article data required to address customer requirements are locally stored. In other words, since destinations and customer preferences vary from one location to another, the locally available range of tickets also differs. The machines need to access SBB's central system on-line via the BATS server for only five percent of all customer needs. This has the advantage that, when the ticket counter sales system breaks down, BATS is available to perform a backup function.

The ticketing system's second pillar of stability is the central management system. The machines auto-

matically report special events (full cash storage unit, end-of-paper, etc.) to the management system. This early warning system enables preventive maintenance to be performed, so that potential problems can be corrected before they occur.

The networking capability offers even more advantages. Not only does the management system handle adjustments to fares and ticket ranges, but it also allows individual machines to be remotely serviced. The sales data flow via the BATS server in the reverse direction to the back-office system in the SBB host.

Second largest sales channel

In the eight years since they have been in use, the BATS machines have become the most important distribution channel next to SBB's Prisma2 over-the-counter system. Around two third of all rail tickets are purchased at touchscreen machines, and the number is growing. Astonishingly, supplementary functions such as the recharging of prepaid mobile phone cards account for one fifth of the revenue generated on the BATS system. In addition to the prepaid business, the BATS system can also incorporate other third-party services.

Three follow-up orders with updates

"By selecting BATS, SBB has also opted for a long-term cooperation with Ascom (now ACS)," says Jürg Spaeti. "For us, ACS was and is a reliable partner with whom we have an excellent working relationship."

All set for the future

Alongside the phased installation of the 384 new machines, the oldest machines still in use at SBB will be decommissioned. The new BATS will be distributed throughout SBB's entire rail network, in more concentrated numbers along Lake Geneva, as well as in Zug and Bern. And recently a second Swiss transport operator – the BLS (Lötschberg Railway) – has joined SBB in selecting BATS.

Basically, BATS is a networked PC with touchscreen user interface. Given the industry standard, its life expectancy is all the more remarkable and has by no means reached the limit in the ten years it has been in operation. "With another upgrade the BATS system can be raised to this status and will remain in use for some years to come."

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¹ This project was executed by Ascom's Transport Revenue Division. The Division was sold to Affiliated Computer Services, Inc. (ACS) in December 2005.