

Reference Case BVG Berlin

Berlin reaps the benefits of TVM upgrading



Facts & Figures

- 736 B8040 Retrofit machines

Requirements

- New technology concept and new-design doors
- Integration for cashless payment
- Online management and maintenance (Berlin transport network)
- Complete online management system for TVMs
- Integration in SAP
- Readiness for electronic ticketing

Almost a billion passengers a year use the Berlin Transport Authority (Berliner Verkehrsbetriebe, BVG) network. To manage this huge volume effortlessly, cost-effectively and even more efficiently, BVG commissioned its long-standing partner Ascom (now ACS¹) to modernise its ticket vending machines (TVMs): a challenge which was optimally solved with the aid of ACS' Retrofit upgrading kit.

Ideal conditions

Due to the age of the 700 or more machines installed throughout Berlin's public transport network, the need to modernise has existed for some time. So the status and timing also offered ideal conditions

for achieving several objectives in one go: conversion from the German mark to the Euro, a significant improvement in the offerings from some 40 fares to almost 800 basic fares, expansion of cashless payment options, implementation of an electronic accounting system within SAP, and a central on-line management system for the technical monitoring and administration of the machines.

Marked increase in efficiency

Using the existing infrastructure as a basis, the TVMs were upgraded and networked by ACS to create a comprehensive on-line ticket vending system. The increase in efficien-

cy for the BVG was substantial, as the new ACS' on-line ticket vending system can monitor and control the entire fare collection process. The modular software solution allows to record and evaluate sales data and monitor equipment functions centrally. As a result, faults can be corrected not only rapidly but also cost-effectively, and with minimum loss of revenue.

Integration of third-party providers

Additionally, the software package manages the exchange of data between TVMs, the equipment infrastructure and the BVG accounting system, creating a technology platform for the planned future in-





Integration of TVMs in an electronic ticketing system.

Phased implementation

Developing and integrating the offerings of the Berlin-Brandenburg Transport Network (Verkehrsverbund Berlin-Brandenburg, VBB) was one of the major challenges. Through phased implementation, and within a short space of time the machines were able to issue 98 percent of the most commonly used tickets. Another challenge was how to upgrade the old machines without disrupting ticket sales. The solution was to retrofit other older machines of the same type ahead of the dismantling operation. The resulting continuum of machines were ready for assembly, dismantling and upgrading. The Arcos central management system that features, among other things, a completely integrated system for maintenance and service is designed to enable expansion for future applications at any time (e.g. electronic ticketing or electronic ticket, EFS).

Future potential

Creating a technology platform for further development of the project has now opened up completely new options for the future. For example

Klas Beyer, BVG Head of Marketing and Communications and Head of the BVG Project Management Team, sees new possibilities in the implementation of a flexible sales management system that incorporates advertising measures, as well as in the further development of TVMs to create a point of sale that also offers non-transport-specific products, such as the already implemented recharging of prepaid mobile phone cards. Beyer also envisages optimising sales within the city of Berlin by incorporating other existing sales channels, and further developing of cashless payment options. Currently, cash cards and debit cards can be used in addition to cash, but for security reasons credit cards are not yet accepted.

Positive response from users

The BVG is therefore in a good position to leverage the available technological potential in future. And it goes without saying that passengers in the German capital will also continue to benefit from this potential. The response to the new ticketing and payment options as well as the highly user-friendly interface has been extremely positive. And the new, modern design in the BVG colours also found unquali-

fied acceptance within a very short space of time.

Complex range of tasks

The Retrofit upgrading fit posed a very special challenge to ACS, simply because an upgrade is always much more complex than a new project. ACS' partners in Berlin demonstrated these very attributes in Berlin. Klas Beyer cites another positive aspect of cooperation with ACS: "An increased knowledge of the dynamics of project work." Moreover, he also emphasises "the importance of thorough groundwork ahead of the project, including the resultant contractual provisions" – and his satisfaction with the outcome. The collaboration with ACS was "constructive, creative and solution-oriented," says Beyer.

Customer

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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.