



LEIPZIG, GERMANY

Dynamic Passenger Information System

Background/context

In the early 1990s, the dramatic increase in individual motorisation in the Leipzig area made it difficult for the public transport providers to interest passengers in trams. The now well-known barriers such as insufficient information on times of departure, route services and destination of the trams were revealed. At the same time, increasing congestion was lengthening tram journey times. The system's control centre could get real time information on the traffic situation only through its in-house radio service.

Case description

At this time the Leipziger Verkehrsbetriebe GmbH (Leipzig Public Transport) decided to set up a computer aided operation control system (COCS), consisting of:

- a control centre,
- communications, and
- terminal equipment.

The purpose was to enable the control centre to take proactive action.

Legislation and policy issues

Because the passenger-information service reduces access barriers to public transport and attracts passengers, these projects are eligible for EU funding. Getting more people to use public transport also contributes to environmental protection.

Cost and financing

The costs for equipping a tram stop with information displays vary between EUR 8,000 and EUR 50,000 depending on the display size of the indicator unit and the required readability. The tram lines to be displayed and the number and size of display units allow a wide range of available display units.



Results

The new technologies offer operational advantages:

- acting instead of reacting
- the provision of real-time information on the location of trams and their timetable situation
- monitoring of port turnaround times
- the possibility of statistical evaluation of travelling times and congestion
- giving information about possible route connections
- comprehensive passenger information and greater convenience for passengers and drivers.

Dynamic information systems allow for better adherence to time schedules and increased travel speeds. Passenger information is a key factor in improving customer satisfaction.

Problems

- It is difficult to determine which display and acoustic technologies are appropriate.
- It is difficult to decide which departure times (scheduled and/or real) are necessary and useful for display.
- The benefit of passenger information systems is not possible to estimate in monetary terms.

Transferability and success factors

The solution is transferable to other public transport companies as the solved problems are the same.

Lessons learnt

With regard to the display technologies, it is rather important to see that they are air-tight, water-tight and maintenance-free to minimise operating costs. In addition, the window of the display has to be equipped with an anti-reflective coating to ensure good readability.

When considering the installation of passenger-information systems as stationary units on vehicles or by means of mobile phones, lifecycle costs should be estimated for a period of 10 years. Costs of data transfer, scheduled maintenance and data supply should be taken into account.

Lessons learnt

The benefit of passenger information systems is the subject of marketing and acquisition expenditures. In order to demonstrate the importance of these measures it is advisable to carry out surveys of passengers before and after implementation. The information supply has to be of high quality, i.e. the information has to be correct, and when failures occur, these have to be cleared up with notices that service has been restored to normal. The passengers want accurate, dependable information.

References and contacts

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