The public transport company PaderSprinter at a glance

A total of 100 buses operate in and around the German city of Paderborn ensuring comfortable and reliable public transport for all. In 2014, the bus fleet covered an impressive 4.6 million kilometres. Around 16 million passengers used the PaderSprinter services in the same year. This equates to around 44,000 passengers a day. The region boasts a total of 302 individual bus stops, meaning passengers can reach their starting points and destinations quickly and conveniently.

Interview with Maik Fletcher, AVLC Systems Manager, PaderSprinter

It has become essential for public transport companies to have a solid and reliable database if they wish to operate competitively in today’s environment. Thanks to the powerful functionality offered by the current Business Intelligence solution, any deviations to the regular service can be determined with precision. This means it is then possible to implement and track effective counter measures.

During our interview with Mr Fletcher it became abundantly clear why PaderSprinter opts to use the Business Intelligence tool, which performance key indicators it relates to and what the resulting benefits are.

How important is it to analyse your systems on a regular basis?

**Mr Fletcher:** For me and in light of my role within the company, it is extremely important to analyse the ‘pure’ AVLC data as this provides the basis for an ongoing improvement in the data quality. This includes data relating to the locating function, the radio quality and the quality of traffic light preemption.

For the public transport operator in general, the focus is on an analysis of punctuality, passenger numbers and operational performance. These evaluations provide a solid foundation for important business decisions.

What do you hope to achieve with these evaluations?

Detailed evaluations are essential for a reliable assessment of the operational procedures. They highlight opportunities for improving the overall efficiency of the service on offer and provide a valuable insight into future requirements.

How do you record this data?

We have been successfully using the Business Intelligence software from Trapeze for many years. Thanks to an integrated connection with our Trapeze AVLC system, we have direct access to all the necessary data. We can open reports and view statistics via the user friendly interface and this information then provides a reliable basis for the various departments.

Which functions do you rely on?

As a company we made a conscious decision to purchase a comprehensive selection of Business Intelligence modules. This allows us to meet the many and varied requirements of the various internal departments. Whilst the planning department, for example, is interested in modules for analysing punctuality,
passenger numbers, service quality and operational performance (mileage data etc.), the engineers are more interested in the evaluation of traffic light preemption, locating quality and radio availability. The system monitoring functions provide information concerning the radio coverage of the vehicles and this allows us to quickly uncover and resolve any technical issues.

“The various BI modules satisfy the diverse requirements of the different departments.”

What data are you mainly interested in?

The quality of the data is everything. The individual components must slot together and function like the well-oiled cogs of a machine. This begins with a precise planning process and continues with reliable technology. Vehicles, control centres and radio systems must all work in harmony and without error. We regularly assess our main KPIs in order to guarantee this essential requirement. This includes values such as punctuality and transfer protection but also a range of technical parameters such as radio quality. The backbone of any successful control system is the underlying radio system. We must know with certainty it can operate without bottlenecks or interruption. Thanks to the systems and software we have in place, this essential data is at our fingertips and the important KPIs available at the touch of a button. Once we have detected any discrepancies, we can begin with the necessary investigation.

Does this data provide a reliable basis for sound business decisions?

The BI system represents a central storage area for almost all data arising from productive operation. It eases the process of recording large volumes of data quite significantly. Automation is key. The data is recorded automatically, transmitted to the correct location and prepared accordingly in the individual datamarts, where it is then available for analysis. The many parameters on offer provide a multitude of evaluation possibilities in order to supply a high quality foundation for both operative and strategic decisions. The inherent system transparency affords us an accurate overview of their effectiveness, both looking back and moving forwards. User rights management determines who has access to the various data and reports. Thanks to the web-based operating concept, these users do not require any additional installations on their workplace computers.

How complex is the analysis process?

The time frame, evaluation objects and scope are all determined very quickly. All that is subsequently required is a simple mouse click on the ‘create report’ option in order to view the required data in clearly structured tables and diagrams. Initial rough assessments can already be drawn at this stage. Thanks to the drill-down functions, it is possible to gain a valuable insight into the collected data, right down to the individual values. In a very short space of time it is possible to identify problem areas and where the possibilities for improvement lie. The drill down, which is available by clicking on the various overviews, helps us to identify the cause of any distorted values and to implement effective countermeasures. The aim of all this is to bring our company to the forefront of public service and to maintain and constantly improve on our high levels of customer satisfaction.

How do you measure the efficiency of your operation?

We use a set of defined KPIs. We are constantly striving to improve the quality of our service. When measuring the efficiency of operation, we filter out any rogue values. These measurements and data drag down the KPIs, or in other words, have an adverse effect. We then look for a reason. It’s interesting that the various evaluations and results can often point to correlations that would never have been foreseen in advance! Thanks to the data thus derived however, they are suddenly crystal clear. We can learn a great deal from these processes and at the same time draw ever nearer to our ultimate aim—the continuous improvement of our data and services. We never view this as a one-off process. A transport authority is a ‘living’ thing, which demands constant attention. Routes, timetables and connections change, construction work becomes necessary, major incidents occur and technology progresses. BI helps us to keep our transport authority on the right track. And in turn remain true to our motto “PaderSprinter – Kommt gut an.”

Mr Fletcher, many thanks for the interesting and informative interview!

Trapeze Switzerland, 27th November 2015