

## Cost savings at KLM Equipment Services made possible with QlikView

“Aviation is all about cost savings. Our customers contractually demand regular insight into cost, malfunctions and percentages for usage and failure. Before QlikView, answering ad hoc questions would take between one and two weeks. Now, they are answered within one hour.”

*Ad Demmers, Fleet Manager, KLM Equipment Services*

KLM Equipment Services B.V. is an independent subsidiary of KLM Royal Dutch Airlines. The company is extremely knowledgeable in all aspects of ground support equipment (GSE), the vehicles and equipment for handling airplanes on the ground. KLM Equipment Services handles such services as maintenance, repairs, planning, distribution,



storage and fleet management (leasing, purchasing and lease-back). They manage approximately 3,000 motorized vehicles, 3,900 non-motorized vehicles and around 6,100 units of hoisting equipment. KLM Equipment Services aims to save costs for its customers, amongst which are KLM, Menzies, Martinair and Transavia.

The services of KLM Equipment Services are aimed at saving costs. In the last 10 years KLM Equipment Services has managed to reduce the costs of the KLM fleet by more than 53 %. QlikView has played an important role in this. The fleet managers at KLM Equipment Services are responsible for the purchase and maintenance of ground support equipment for their customers. Being able to quickly deliver adequate dynamic reports of, for example, repairs, malfunctions, usage statistics and depreciation, is crucial. Ad Demmers, Fleet Manager at KLM Equipment Services: “Aviation is all about saving cost. Our customers contractually demand regular insight into cost, malfunctions and usage and failure percentages. For this, we process enormous amounts of data. The vehicles of KLM Equipment Services travel approximately 5 million kilometers a year, undergo 2.6 million fuel transactions, 200,000 mechanics hours, receive 200,000 parts and 5.6 million start/stop/GPS transactions.

Before the implementation of a Business Intelligence solution we provided these reports using Excel, but this proved to be too limited. There were several issues: from control issues and the complexity of retrieving data from our AS/400 database, to the fact that the

### Solution Overview

#### KLM Equipment Services

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#### Industry

Transport & Logistics

#### Function

Service & Support, Operations, Supply Chain, Finance, Six Sigma, Quality Management

#### Geography

The Netherlands

#### Challenges

- Reporting on and analyzing large quantities of data
- Making contract evaluations
- Decreasing report generation hours

#### Solution

KLM Equipment Services implemented QlikView for all of its customers and employees. With QlikView, KLM Equipment Services is now able to easily and quickly create reports and analyzes on a strategic, operational and tactical level. The same number of people now provide more information, with higher data volumes.

#### Benefits

QlikView helps:

- To make better investing decisions
- To realize operational maintenance cost savings
- To achieve higher customer satisfaction percentages
- To make more reports available using the same number of people

#### Data Source Systems

Source systems: AS/400  
Database: DB2

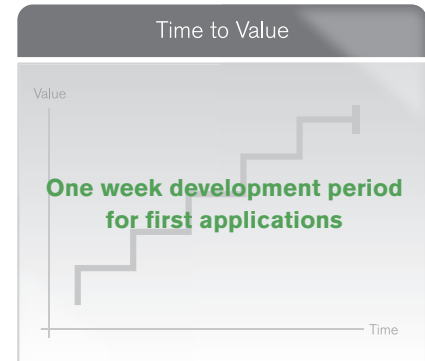
reports were extremely labor-intensive, difficult to reproduce and highly error prone. Furthermore each of KLM Equipment Services' customers, have different reporting needs. One wants to know if a vehicle is being used down to 15 minute intervals, whereas another might want to know how high maintenance cost are for a specific vehicle on a weekly basis. Another problem with Excel was the size of the files. Maintenance reports over longer periods would result in files of over 100 Mb. This was unmanageable in Excel."

After extensive selection procedures, during which QlikView was compared to other tools such as Cognos and Business Objects, KLM Equipment Services chose QlikView because of the easy-to-use graphic interface and the simplicity of linking to DB2. "For the pilot project we recreated a number of Excel reports in QlikView," says Ad Demmers. "It did not take long before we were convinced that we had made the right decision! Unlocking the data took only 30 minutes and reports proved to be very dynamic and easy to deploy. It was also incredibly easy to connect to other applications, including Microsoft Office, making it possible for us to publish complete QlikView reports in PowerPoint. And finally, QlikView gave us an user friendly insight into our data on different levels."

KLM Equipment Services soon moved to the development of three QlikView applications that meet their most important reporting needs. All applications at KLM Equipment Services were designed internally and run on

AS/400 iSeries. There are applications for invoicing, downtime, time registration, parts usage, fuel transactions, road patrol services and vehicle black boxes. The required data for the QlikView applications is extracted from the AS/400 using an ODBC connection. "The three main applications we have developed have been divided into strategic, operational and tactical levels and have been developed with QlikView 8.5," says Ad Demmers. "Our strategic application reports data at a contractual level. For this purpose we defined various KPIs that support us in evaluating current contracts. The tactical application reports on a Fleet Management level. Issues such as cost and availability (usage and downtime percentages) of a specific vehicle can be reported on different levels and over extended periods of time. Our QlikView operational application provides insight into maintenance details, mechanic hours, malfunction reports and used parts. In addition to these three main applications, we also have a large folder named "Development" which contains unique and specific requests. Before QlikView, answering these ad hoc questions would take between one and two weeks. Now they are answered within one hour."

Making better investment decisions, increasing operational maintenance cost savings, the ability to produce more information in a shorter period of time and increased customer satisfaction by making our reports available through the internet are the biggest advantages KLM Equipment Services received by implementing QlikView. "Nowadays vehicles last much longer, therefore



we also need to be able to look back further, so that we can analyze data regarding cost, failures, usage and downtime percentages over the vehicle's entire life cycle. This information is essential in making decisions about new investments. Without QlikView this would not have been possible. The data files in Excel were simply becoming too big. Furthermore, KLM Equipment Services can now increase efficiency on different levels, resulting in huge cost savings for us and our customers. With QlikView, we immediately detect recognizable patterns, such as repetitive failures, starting engines requiring replacement too quickly or vehicles that require new tires every month. We are currently working on an Internet Explorer plug-in that allows us to make QlikView reports directly available to our customers, making spreadsheets obsolete. Our customers can now create drill-downs themselves and do detailed searches on their own. This is all achieved with the same number of people; we can now provide more information, more efficiently and directly anticipate irregularities.

“QlikView helps us make better investment decisions, save on operational maintenance costs for our customers, and provide them with insight into cost, failure and downtime percentages.”

*Ad Demmers, Fleet Manager, KLM Equipment Services*