



Michael Wright
General Manager
Statefleet

STATEFLEET

Improving business outcomes using predictive analytics and Business Intelligence

Industry

Government, Transportation.

Business Issue

StateFleet were struggling with predicting the residual values of vehicles nearing the end of lease. Selling a vehicle at the right time can save or cost thousands of dollars on each vehicle. StateFleet required a solution that would better enable it to accurately predict the resale of vehicles at the end of lease and deploy this information to the business in a user friendly way.

Solution

StateFleet implemented the SAS® Enterprise Intelligence platform including the SAS® Enterprise Business Intelligence Server and SAS® Enterprise Miner providing predictive analytics as well as Web based query and analysis, report delivery and dashboards.

Benefits

The SAS solution allows StateFleet clients to create and access their own reports directly from the Web, saving time and money. Not only has usage soared to over 800 reports per day but users are getting valuable information from predictive analytics, saving millions of dollars.

Formed by the New South Wales Government in 1990, StateFleet is a full service fleet leasing organisation that delivers fleet leasing and fleet management services to the NSW public sector. With a fleet of over 25,000 vehicles and valued at approximately \$700 million, StateFleet regularly purchases between 11,000 and 12,000 vehicles every year.

Dealing with a complex process

StateFleet relies on its ability to predict the resale value of vehicles once they have reached their end of lease periods. This figure, which is used to determine the leasing cost for its clients, has long been one of the organisation's key challenges. According to the StateFleet General Manager, Michael Wright, the need for risk modelling to assist in the prediction of external market factors that impact future resale value is critical.

"It is an extremely complex process and aside from its inherent difficulties, the integrity of the source data had been compromised over many years," Wright explains.

Adding further to StateFleet's challenges was the provision of reporting capabilities to its clients – a challenge made all the more difficult to meet with a legacy reporting system that required the constant attention of a dedicated data analyst and costly vendor support.

Immediate results

In partnership with SAS, StateFleet implemented a SAS Business Intelligence solution delivering advanced analytics and self-service secure reporting. The results were immediate. Data

is automatically verified and cleansed by the SAS solution, is aggregated and made available to StateFleet staff and clients using the SAS® Information Delivery portal, part of SAS® Enterprise Intelligence Platform.

"One of the major benefits is that everyone is dealing with clean data," Wright says. "In addition, with the SAS solution's ability to draw data from virtually any source, we now have a single portal through which to access data contained in our legacy Ingres database, our new Oracle database and numerous other sources that all contribute to a complete data view."

The users speak

A sure measure of any new system's success is its acceptance by the user community; and based on that measure, the SAS solution could well be considered one of StateFleet's most successful IT projects. According to Wright, the number of reports being delivered to StateFleet has tripled to more than 800 a day since the introduction of the SAS solution.



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"Prior to this, we were delivering around 250 reports daily; and that was fairly close to the limit we could achieve," Wright explains. "It's obvious from the fact that with that number having jumped to over 800, our clients were definitely in need of a better system."

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Previously, meeting the requirements of client reporting was a very time consuming process. The organisation had a dedicated staff member whose sole responsibility was generating ad hoc reports; and even then, it was unlikely that the reports would be delivered the same day.

“The situation now is that our customers use the Web interface and customise reports to suit their own requirements,” Wright says. “All they need to do is use a simple and straightforward menu system and virtually any report that’s required can be generated in a matter of minutes.”

The flow-on effect of the increased reporting capabilities is improvements in fleet management across the entire New South Wales State Government. With immediate access to reports that are now based on clean and accurate data, StateFleet clients are able to conduct in-depth analysis of their fleets, obtaining crucial information relating to issues such as vehicle utilisation, fuel usage and maintenance costs.

Importantly, as soon as the data is provided in report format to the users, it can be exported to an Excel spreadsheet and run against the customer’s own calculations.

Predictive analysis

In commenting on the predictive analysis capabilities being achieved with the SAS solution, Wright says: “It is giving us the ability to create our own models that can more accurately predict the resale value of vehicles.

“One of the main advantages of SAS is the relative ease with which the models can be refined. Already, the models we have developed are proving to be more accurate than anything else we have used in the past.”

The importance of the SAS-based predictive analysis capabilities for StateFleet can be measured in the millions of dollars. In combination with the industry standards, such as the Red Book and StateFleet historical sales data, the organisation determines vehicle lease rates that deliver optimum value to the clients while reducing its own risk exposure.

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Achieving the balance

Another facet of StateFleet’s operations that is being afforded protection by the new SAS solution is optimising the resale value of each vehicle it purchases. Before the organisation commits to purchasing new vehicles, SAS is used to generate a comprehensive report detailing the current balance of vehicle makes and models. The primary goal is to ensure that there is an even spread of vehicle types that come back on to the market at the end of their lease periods.

“If we were to have too many of one make of vehicle coming back to the market at the one time, then the resale value could drop by as much as \$2,000 per vehicle,” Wright explains. “So once again, having SAS deliver clean data and accurate reporting is a major advantage for us in this business.”



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