NO LONGER TAXING

Using SAS to make it easier to interact with the Australian Taxation Office

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Industry
Government

Business Issue
The ATO required data mining tools to enable tax payers to easily interact with the agency and to become a more customer friendly organisation.

Solution
The ATO began using SAS® Business Intelligence solutions including data mining tools and advanced analytics.

Benefits
SAS solutions provide the ATO with an implementation that is scalable and includes a comprehensive range of products that are easy to use. The outcome of the ATO's investment in analytics and other initiatives has been a tangible return on investment from recoveries and convictions.

For both businesses and individuals, life is becoming more complex and the pace of change is ever accelerating. Nowhere does this have a greater potential to challenge processes and resources than within Government agencies. To help it meet that challenge, The Australian Taxation Office (ATO) has chosen SAS® Business Intelligence solutions as its key statistical-data mining suite.

The ATO is the Country's main revenue collection agency and one of the biggest arms of the Commonwealth Government of Australia. It is charged with shaping and managing the tax, excise and superannuation systems that fund services for Australians, while giving effect to social and economic policy.

Starting with just a dozen staff nearly a hundred years ago, the ATO today employs some 21,500 people and in the Australian tax year ended June 30th 2006 collected AUD $232 billion (approx. USD $176 billion).

The workload involved is demanding. The ATO currently processes some 27 million tax returns and activity statements a year; answers 11 million telephone enquiries; maintains 18 million tax payer accounts; and regulates some 300,000 self-managed superannuation funds.

How does the ATO use SAS?
The ATO began using SAS® data mining tools in 2004 to help address two major change processes. The first of these was to enable tax payers to increasingly do business with the agency, electronically – to make it easy and convenient for people to submit their statements and returns via the Internet. In parallel with this, the ATO sought to process taxpayers' inputs in a more timely and responsive manner to ensure that refunds were paid and debts collected on time.

The second major objective was equally important – to be a more customer-friendly organisation. For many people, interaction with tax authorities has been a daunting once-a-year obligation. The ATO sought to change that for Australians by becoming more readily approachable and, in the words of Warwick Graco, a Senior Data Miner in the Office of the Chief Knowledge Officer, Australian Taxation Office, "By providing an easier, cheaper and more personalised service".

SAS software is assisting the ATO to develop models to understand its clients better and to customise services to them for both customer relationship and compliance purposes. Thanks to data mining and to other research and analysis of taxpayer needs and wishes, the agency has consigned to history the 'one-size-fits-all' approach. The ATO, like the banks, wants to tailor its services to match the needs and circumstances of each taxpayer. This means minimal contact with those who do the right thing in meeting their tax obligations and fair and firm treatment with those who do not.

THE POWER TO KNOW®

Warwick Graco
Senior Data Miner
Analytics Project, Change Program, ATO

The ATO currently has in excess of 30 analytical models in development, including models that analyse information for clues to incorrect tax liability reporting, including tax evasion or avoidance.

For example, using both its own data and data sourced from third parties sources, it is possible to spot apparent mismatches between, say, an individual person's declared income and a propensity for expensive motor cars or other less common lifestyle spending. SAS calls this getting at 'one version of the truth' – The Power to Know®. In times of prosperity, self-employment tends to proliferate and, with it, the expansion of cash economies which lend themselves to concealment. In the case of a company, for example, modeling a company's returns with its declared staffing levels and generic data relating to the business the company is in can reveal apparent under reporting of revenues and over reporting of outlays.

Tangible ROI

The ATO modeling is not to be feared by people who make genuine mistakes. Tax Commissioner Michael D'Ascenzo said in an August 2006 media release, "Data-matching with third parties will continue to be a feature of our compliance approach which effectively targets errors and failure to comply, but also means we don't unnecessarily bother people who get it right".

Highlighting the ATO's return on its investment in analytics and other initiatives, the agency's preliminary results for the 2005-06 tax year revealed that AUD $51.8 million was restrained, confiscated or recovered from the 'proceeds of crime' and 100 successful convictions were secured resulting in many millions of dollars in fines and prison sentences of up to five years. Such modeling obviously requires very sophisticated and scalable Business Intelligence tools plus a high level of product support and continuous improvement. A September 2006 report by prominent market analyst firm IDC* found that SAS showed the "most diversity and highest momentum" amongst the ten leading suppliers of business analytics software.

The benefits of SAS

Warwick Graco says SAS® software offers several important benefits for his own operations.

The first being its scalability. Many of the ATO people who analyse data using SAS tools are invariably dealing with entire populations rather than individual samples and so the robustness of the tools is vital.

The second important benefit is the breadth of the SAS suite. The SAS range makes it possible to select the right tool for a given task and all are well tried and tested in the real world, giving users higher confidence in their use.

The third important aspect for the ATO, according to Warwick Graco, is ease-of-use. He elaborates, "Obviously you need some knowledge of programming but SAS is easy to use because it involves many point, click, drag and run operations. For example, SAS has a library of ready-to-use algorithms so you don't have to spend a lot of time writing code – you just call up the algorithm you need for the job at hand." He added, "When you are under pressure to produce results to tight deadlines, not having to reinvent the wheel is a huge benefit. The visual programming features of SAS®9 boost productivity even further."

The widespread availability of SAS skills is also very important to the ATO. SAS enjoys a high market penetration both in Australia and worldwide and this has significant benefits, according to Graco: "There are lots of people out there with SAS skills and experience so it doesn't leave a gaping hole if you loose a key member of your team. We know we can replace departing staff and plan ahead while keeping within budgets." This is obviously important given that industry watchers predict annual growth of 10 per cent in the use of analytical software through year 2010.

In an earlier career over 20 years ago, Warwick Graco was an organisational psychologist and says SAS's business culture has been a big factor in the company's success, adding, "If you have a happy organisation, then you are going to have a good product. The happy organisation philosophy has paid off handsomely for SAS."

*Worldwide Business Analytics Software 2006-2010 Forecast and 2005 Vendor Shares' report