

Ministry of Justice: Justice Data Warehouse Project

Project Overview

Using technology to address real needs in society, this project was the first step in a long-term plan to provide relevant, timely and accurate statistical information. With the planned decommissioning of LES¹ as the initial driver this project ensured the retention of more than 25 years of justice statistical information. This wealth of information allows statistical researchers and policy analysts to assess impacts of legislative change, justice related trends, evaluate key justice programmes and strengthen critical forecasting eg. prison populations. Through this it will support and improve justice sector policy development, the operational capability of the Ministry of Justice and the decision-making capability of the Government.

The data warehouse project forms part of the *Justice Information Strategy 2003-2006*. Very much a business-driven project, there was an emphasis on consultation with key end-users of justice sector information. The technology aspect was seen as a means to an end and the first step of a much longer journey to achieve business benefits for the sector and beyond.

Today

The justice data warehouse is now fully operational and is the foundation for a new era in sector-wide statistical reporting. Completed on time and within budget, it is an excellent example of good project management, relationship management and what good sector collaboration can achieve in the face of significant change.

Development

In its development stages, key deliverables included:

- An operational justice sector data warehouse and a key justice sector information asset
- Implementation of data flows from Department for Courts and the Department of Corrections
- Archival requirements from LES.

The data warehouse is running Windows Server 2003 on HP Compaq servers. Extraction, transformation and loading are done via a mix of custom-developed components built using Microsoft's .Net platform and the data transformation services module in SQL Server 2000. The core data stores were designed and implemented using ERWin 4.0 with automated data feeds from Corrections and Courts. The data access and support applications were developed using a mixture of Microsoft ASP and ASP.Net and Crystal Decisions Crystal Reports 9.0.

Those applications provide data lineage, metadata, data access and user tracking services to the systems administrator and the Ministry's Research and Evaluation Unit. All applications are browser based and delivered via Microsoft IIS and managed through active directory using integrated authentication.

Challenges

One of the key business drivers for the project was the decommissioning in June 2002, of LES, which was the central platform for information management across the sector. The original

¹Law Enforcement System (Wanganui Computer)

deadline imposed by this process was a major challenge, although the deadline was later revised in line with other changes across the justice sector.

Other challenges the team worked through included:

- Working at a time of major cross-sector system changes in the wake of the Sentencing and Parole Act 2002 legislative changes
- The rolling implementation of the Department for Courts' Case Management System
- The migration of LES data to operational systems occurring concurrently.
- The dependency of data warehouse flows on the successful completion of particular migrations, and the periodic rescheduling of the major milestones associated with those migrations was a constant challenge for the project team.

All these challenges meant the project team had to work around other organisations' commitments, which were often seen as a more immediate priority. These challenges were recognised at the inception of the project and were carefully managed, ensuring risks were mitigated, relationships were appropriately managed and appropriate contingencies were in place.

Key Success Factors

Our key success factors were the project's governance framework, with a strong commitment from the project sponsor, and the emphasis on relationship management.

The project was overseen by a steering committee of senior managers from Courts, Corrections, Police, LTSA, Statistics, SSC E-government Unit and the Ministry of Justice. While the Ministry managed the project, there was substantial operational input across the sector. This ensured the project team kept focused on the sector's requirements and aligned with the long-term vision.

Recognising the key importance of relationship management, the team ensured that relationships with sector and central monitoring agencies were well managed at all levels. This, along with focused project management, ensured that progress was optimised and the project was well positioned to overcome the many setbacks that eventuated.

Benefits

Some of the benefits that the data warehouse is bringing to the sector and beyond include:

- Improved support for outcomes-based policy development and decision-making
- Greater data access, flexibility and timeliness to respond to ad hoc queries
- Provides Sector based view of Justice data
- Supporting key research initiatives e.g. prison population forecasting and monitoring the effects of new policies and legislation, such as the Sentencing Act 2002.
- Data updates are daily and weekly where historically had been up to six monthly

The data warehouse is flexible and can be developed to meet future policy and data needs. Future enhancement will be based on inter-agency collaboration and this work will continue with the range of sector representatives.

Work is also continuing with key users of the data and statistical information, as well as with other stakeholders, aiming to ensure that the promised long-term benefits are achieved.