



Case Study: South African Revenue Service (SARS)

About the Company

The South African Revenue Service Act of 1997 amalgamated the former Inland Revenue, and the Customs and Excise departments, resulting in the formation of South African Revenue Service (SARS). SARS' mandate is to collect and administer national taxes, duties and levies, as well as to protect and support the South African economy by facilitating trade and managing stakeholder relationships. SARS, being in the best position to judge the exchequer potential of the economy, also advises the Ministry of Finance in South Africa on tax reforms, widening tax base, tax simplifications and concessions.

Business Challenges

- The Information Management (IM) Department in SARS had a big responsibility of delivering accurate reports; perform data analysis from their Enterprise Data Warehouse EDW (where all SARS Transaction data was accumulated), thus enabling all the regional managers across South Africa to view Reports for their individual regions related to Income Tax, VAT, PAYE, SDL, and UIF Revenue Subject Areas
- The IM Departments Solution Delivery Team Implemented COGNOS 8.0 as the BI-Tool to solve all their needs in order to fulfil above requirement
- The Solution Delivery (SD) Team in IM department conducted a Road Show, in order to address all issues regarding the SARS Business needs etc and how the SD Team can address those issues by showing the Business People the Features/Functionalities of COGNOS
- The Overall benefit to SARS on technology front was that the Road Show was huge successes, which lead to new requirements and making COGNOS as their Current BI Tool replacing all other tools.
- The SD Team uses Cognos with TeraData and is delivering Business needs efficiently

Nihilent's Role

Nihilent was part of the Solution Delivery Team and carried out the following functions:

- Analyze Business requirements by dealing with SARS business officials
- Prepare the User Requirement Specification documents for the BI-Solution Delivery Team in order to generate reports
- Generate Fact Table and Dimension Tables in TeraData Database for the given report requirements
- Load Data into TeraData Tables from EDW by writing TeraData Queries and executing them in a batch process
- Create Models in Cognos Framework which included Creating Fact Table Query Subjects, creating dimension query subjects, adding Metrics using Metrics Manager
- Design and Create Reports by analysing the User Requirement Specification Documents designed by the Business Analysts in Solution Delivery Team

Business Benefits Delivered

- Accurate delivery of reports by performing exact data analysis from their Enterprise Data Warehouse EDW (where all SARS Transaction data was accumulated) has enabled all the regional managers across South Africa to view Reports for their individual regions related to Income Tax, VAT, PAYE, SDL, and UIF Revenue Subject Areas for further course of action & analysis.

Technology Used

- Cognos 8.0: Framework Manager, Metrics Manager, Query Studio, Report Studio
- TeraData Database: Writing Scripts and populating Tables in a Batch
- SQL 200 Server Database: Metrics Manager Data Transformation Services (DTS)
- ExtractTransformLoad (ETL) using Data Stage Designer
- Microsoft Dot Net 2005: Windows Application for Replacing Batch variables in the Scripts