

The Inland Revenue

The Trillium Software System® helps the UK's Inland Revenue to centrally manage vast amounts of customer data.



<p>Project Type Data Consolidation</p> <p>Industry Government</p> <p>Environment Unix</p> <p>Challenges Large Volume of Records Diverse Legacy Systems Various Sources, Multiple Formats</p>
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The Organization

The Inland Revenue is responsible, under the overall direction of Treasury Ministers, for the efficient administration of income tax, tax credits, corporation tax, capital gains tax, petroleum revenue tax, inheritance tax, national insurance contributions and stamp duties in the United Kingdom. The Department's purpose is to ensure that everyone understands and receives what they are entitled to and understands and pays what they owe, so that everyone contributes to the UK's needs.

In the early 1990s, the Inland Revenue decided to outsource its information technology services allowing it to concentrate on its core business. Through a competitive bid process, EDS was awarded the 10-year contract in June 1994 and is now the Inland Revenue's strategic IT partner.

The Challenge

In common with many large organizations, the IT support for the Inland Revenue in the mid-1990s consisted of a number of largely independent systems focussed on supporting different lines of business. Similar information was held independently in more than one system with each system containing separate facilities to maintain this information. This situation sometimes led to inconsistencies and the process of verifying and validating information such as name, address and National Insurance Number (NINO) was often difficult and time consuming.

Success Story

The Solution

In 1997, the Inland Revenue and its strategic IT partner, EDS, developed a strategy aimed at overcoming the problems with the portfolio of existing systems. One element of this strategy was a component-based architecture. In this architecture, common data and common services would be provided by shared components, removing duplication of records and reducing cost of maintenance. These corporately shared components are referred to as frameworks.

One of the first components EDS delivered was the Address framework. This component provides a central capability to manage address information and support the use of clean, verified addresses. The intent is that all addresses used by the Revenue will be held in the Address framework. Any use of an address in association with a particular customer then only needs to refer to the entry for that address in the framework.

At its heart, the Address framework contains the Postcode Address File (PAF) to provide the list of 27 million verified UK



Success Story: The Inland Revenue

addresses recognized by the Royal Mail. The Address framework also holds details of 17 million addresses that cannot be matched against the PAF, either because they are new addresses or because they are non-UK addresses. Users are faced with the challenge of matching a customer's address with what is on the PAF.

The Address framework uses the Trillium Software System® to provide services that enable users to search for addresses using partial elements such as house numbers and postcodes. Trillium Software System parsing functionality is also used to analyze the constituent parts of input addresses. This increases the ability of the software to recognize relationships in the data. Trillium Software System is also used to rank possible matches against input data, which lets users view the most likely matches in a list of likely records.

The Inland Revenue faces another problem. Most UK citizens can be uniquely identified by their NINO; however, the Inland Revenue receives correspondence through many channels in which the customer NINO is not supplied. System users need facilities to help them find people on the basis of other details, such as name or address. EDS developed a Tracing framework to support this requirement.

The Tracing framework contains a copy of data from other frameworks, such as the Citizen Identification framework, which holds details about all of the Inland Revenue's customers, and the Address framework. The Trillium Software System parses this data into separate elements to help

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Data management enables us to progress towards the 'joined up government' vision, develop seamless, quality services and make best use of the data we receive.

**Nick Montagu,
Chairman of the Board of
Inland Revenue**

build indexes so that the data can be searched more effectively.

When a user makes a search request the Trillium Software System is again used to parse the data within the submitted query. This parsed data can be used to identify possible matches from the indexes built in the Tracing framework. The Tracing framework, like the Address framework, makes use of Trillium Software System matching to rank possible matches so that the user sees the most likely matches first.

As with all Trillium Software System implementations it is the business's own individual needs which define the matching rules. The software is simply a very flexible, highly tunable toolkit enabling business people to identify relationships between individual records.

The Results

The Inland Revenue's adoption of a component-based architecture has allowed it to improve the quality of information that it holds about individual customers. The use of the Trillium Software System in a Tracing environment allows users to find customer records quickly and easily. New projects can now make use of these shared corporate components at significantly less cost than developing the same facilities within the scope of an independent application.

With a central source of verified information available to the whole organization, the benefits to the organization are clear:

- 1) There is now a single view of data across the entire organization.
- 2) The data can be maintained and updated in one central location.
- 3) The Inland Revenue is not constantly commissioning new development, as there is now a re-usable component.
- 4) Clean, current data facilitates better decision making, enhances customer perception and provides an accurate basis for planning into the future.

**About Trillium Software™**

In more than 1,000 implementations worldwide, the Trillium Software System® identifies, standardizes, enhances and links global data in CRM, ERP and online applications. Recent sales of the Trillium Software System to a number of the world's largest and most technologically advanced companies have positioned Trillium Software™ as the leader of the data quality marketplace. Trillium Software technology enables global organizations to gain a unified view of customers, distributors and partners through real-time connectivity with their business pipelines. For more information about the Trillium Software System, call (978) 436-8900 or visit Trillium Software online at <http://www.trilliumsoftware.com>.