

Data Warehouse: Developing a SOX-Compliant, Future Oriented Solution

The Challenge

Tracking information that doesn't fit into any of a company's IT systems has long been addressed without consideration to standards or audit controls. If the volume of data is manageable, the individuals who are responsible for maintenance and reporting keep the data on their PC in a document, a spreadsheet or a simple database.

Such was the case with our client's Incentive Compensation Grants data. There were 8 different types of grants being tracked in 8 different file types by different users. One individual in the company was responsible for consolidating the data and extracting information for reporting. They alone controlled all input and output within their database.

When this compensation data was earmarked for exporting to the company's web based self-service application, the existing solution came under scrutiny. The lack of standards and controls, as well as a failure to comply with SOX requirements forced the company to quickly reinvent the data repository.

The Solution

Given the short timeframe available to produce the first data export, our Business and Technical analysts proposed a two-phased solution.

In the first phase, functional specifications were developed with a focus on the long-term data maintenance. A database was designed to accommodate the consolidation of data for the 8 existing grant types and to support future products. To address the time constraints, the database was generated in MS Access with modules developed in VB.NET. A basic, but controlled, interface was developed and production of the data export was completed on time.

For phase two, the same design was used to generate an Oracle database and the existing data was seamlessly transferred to Oracle. The phase one interface was replaced with a "bolt on" to the client's existing HRMS system and many of the modules developed in phase one remained intact for phase two. This solution allowed the client to employ their standard security controls, while users were able to access the data using a familiar interface. Additionally, the client's user level access schema managed the separation of duty required for the day-to-day management of the data warehouse.

The Benefits

By designing with the future in mind, LBi delivered an elegant solution that met all time dependent requirements. Audit controls were built into the solution, paving the way for SOX certification. And, for the first time in 13 years, the client can access their various equity grant products in a unified database.

Needs change over time and LBi designs solutions that withstand the test of time. We've learned which design considerations tend to limit growth and we avoid them. We've learned to anticipate ways in which a system will grow and we design with those possibilities in mind.