

Cloud Based Business Intelligence Platform

“The Client’s management consulting practice was expanding rapidly, so needed to replace their legacy business analytics solution with a scalable, cloud based system to meet their growth needs....”

The Client

The Client is an innovative management consulting company with offices in the U.S., Europe and Asia. They are focused on assisting large corporations with their most complex and critical issues. Their core business is assisting corporations extract the maximum value out of their existing strategy through sophisticated analysis of their operations and expenses, leading to solutions that result in real financial benefit. The client concentrates on three broad areas: Performance Improvement, Strategic Services and Business Analytics.

The Business Challenge

The client relied on an ageing distributed desktop based application in combination with the spreadsheets and desktop databases to analyze the client data. This resulted in a fragmented and slow process of data organization and analysis and was cumbersome to operate and manage. Due to expansive growth, they decided to migrate to a web based centralized application that would be scalable, easy to query, generate reports reflecting key performance indicators and provide a better user experience. Some of the specific changes that the client wanted included:

- Migrate from a desktop centric fragmented environment to a cloud based multi user web application
- User friendly interface that provides a better user experience and increase productivity
- Multi-user environment that will allow concurrent users to work on the same set of data
- Consolidated dashboard for analysis and querying the centralized data
- Ability to export the data and reports to user defined formats
- Provide superior performance and scalability to handle large data sets
- Capability to manage security and right level of data access to various users

The Engagement

The scope of services provided by Telliant included the following:

- Turn-key project delivery model from concept to delivery
- Create the functional and technical specifications for development of the new application
- Design and development of the new reporting application
- Testing, benchmarking performance and solution identification
- Developing Test Scripts for User Acceptance Testing
- Developing documentation including user guides
- Migration of data from the existing legacy application to the new application
- Implementation and post go-live support

In addition the customer was interested in:

- Ability to develop highly specialized and complex solutions
- Provide very cost-effective best-of-breed solutions
- Leverage multiple cutting-edge technologies
- Provide outstanding problem solving skills
- Offer professional and personal customer service



“ The challenge was to create a set of applications that performed at peak efficiency while providing a vast range of functionality that was easy to use and administer. ”

“ The Client wanted to leverage cutting-edge technologies to expand their service offerings. ”

“ Our services included full lifecycle software development from analysis, design, development through testing and implementation. ”



Solution Highlights

Flexible Data Management: Ability to load the data in multiple file formats including MS-Excel and CSV text files. Support for large files containing up to 10 million records to a central SQL Server database in an automated fashion through the bulk insert feature. Once a data group is created it can be easily cloned, renamed or deleted.

Indexing and Dimension Management: The system provides a very intuitive way to create multiple indexes and dimensions to help with the analysis of the data.

Intuitive Dashboard: Usage of light weight customizable third party controls such as Sencha and FlexiGrid in the dashboard allows for rapid presentation and filtering of the cube analytics data. The dashboard allows displaying and filtering the data instantaneously across multiple dimensions. Intuitive User Interface design facilitates easy navigation and the grids for the different dimensions can be collapsed or expanded and browsed through easily.

Quick Mapping And Editing Options: Once the data is captured and indexed it is important to be able to re-group the data and map them into different categories and also change the hierarchies to help with the data analysis. The system provides simple ways to accomplish this by providing clipboard type cut & paste functions to make this easily possible to do. The Web application also supports advanced search functions using keyword or tag search implemented via an open-source, high-performance, full-featured text search engine library.

Multi-User Functionality: One of the important benefits the customer derives from the cloud based system is the ability for multiple users to concurrently access a data set. In addition users can be selectively provided access to data sets to keep the end customers confidentiality.

Data Extraction: Data extracts provided to the business users in a paged, sorted and grouped fashion with the ability to export to Excel as desired. Business rules could be configured by the users with minimum need for technical support enabling the users to generate customized reports.

Scalable Cloud Environment: The system was built on the Amazon Web Services (AWS) Elastic Cloud (EC2) environment which allows the web application to scale up as needed based on the needs of the customer.

TECHNOLOGY ENVIRONMENT

Telliand was responsible for identifying and implementing the appropriate technology for this cloud based web application. The factors that contributed to the selection of the technology environment included the performance goals, cost and usability objectives and ease of maintenance of the solution. The major technology components in the project included:

- **Languages:** Microsoft ASP.NET 4.5, C#.NET, J-Query, CSS, JavaScript
- **Database:** SQL Server 2008
- **Framework:** Microsoft Entity Framework 4.0
- **Architecture:** MVC 4.0 with RazorView Engine, AJAX, JSON
- **Custom components:** Sencha and Flexi Grid controls
- **Cloud Environment:** Amazon AWS EC2, Windows 2008 R2 Servers

Results Achieved

The Client achieved the following major benefits from the partnership with Telliand:

- Application delivered was rich in functionality, scalable and easy to administer
- Highly cost effective solution ensuring excellent ROI
- User friendly front end resulting in increased productivity and efficiency
- Multiple user's ability to use the system concurrently
- Customer is able to scale their usage of the system seamlessly

To learn more about how we can help you achieve your goals in the ever-evolving world of IT and innovation, please visit www.telliand.com

“ The various applications were required to be efficient and at the same time be easy to use and manage. Internal applications for administration formed a critical part of the platform. ”

“ The partnership resulted in a unique state-of-the-art platform that met and exceeded the Client's expectations. ”

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