Symphony helped a healthcare accreditation organization to renovate its base version of online Medicare Accreditation software to highly scalable, flexible, and secure web application.

The Client

The client is a US mid-west based healthcare accreditation organization providing Medicare Accreditation program for Home Medical Equipment (HME) and Durable Medical Equipment (DME) companies. They provide one of a kind accreditation program, which is paperless, interactive, and administered over the Internet.

The Challenges

With demand for quality accreditation growing, the client's existing web-based accreditation software lacked scalability, reliability, maintainability, and besieged with security loopholes. Hence, the immediate need was to re-engineer the existing web based software into a scalable, robust, and secure application that can eventually handle all the demands of the accreditation program effectively.

The Solution

Symphony's solution to the client included redesigning and restructuring the entire web-based software into a robust and scalable web application over the .NET platform. Symphony designed N-tier architecture and used .NET entity framework to build a scalable application.

Symphony improved the client registration and 'Accreditation Renewal sign-up' module's user interface using third party control component. Every registered user has an online workroom to tackle the standards one-by-one and keep track of progress online, all the while guided by a Coach. The user can upload accreditation documents of CMS compliance to the workroom. The assigned surveyor can review workroom documentation, schedule a survey, communicate with users, and upload survey results. Based on the survey results, the Accreditation Committee can approve or deny accreditation. This entire process is transparent

Product Development
Re-engineering/Modernization

Platform
Microsoft.NET / Web

Industry / Domain
Healthcare

Engagement Key Points
- Project duration – 12 months
- Peak Team Size – 10
- Team composition – Project Manager, Technical Architect, Developers, Test Engineers
- Engagement Model: Time and Material
- SDLC: Agile using SCRUM
- Release Cycle – short iterations

Technology and Tools Used
- .NET Framework 3.5
- ASP.NET 3.5
- LINQ
- Entity Framework
- Telerik RAD controls
- Crystal Reports

Major Product Features
- Single logon website supporting both http and https protocol
- Flexible online accreditation tool with customized User Views
- Simplified and focused accreditation cycle in a secure environment
- Effective Document Management amounting to 100 GB+ of data
- Adheres to CMS standards

and follows automated workflow.

To enable maintainability Symphony used inline SQL queries that resulted in effortless migration of the existing data to MS SQL server.

Symphony also created a new database structure with right levels of normalization to ensure data integrity together with quick retrieval. Symphony also incorporated a whole set of reports by integrating Crystal Reports to generate reports adhering to CMS standards for audit purpose.

Symphony's robust change management process enabled to control the frequent changes in customer requirements. Symphony's product engineering team maintained the requirements as a user-story and assigned priority to each one. The software development followed scheduling of items based on the assigned priority. The test cycle followed user story testing, regression testing and use of proprietary framework for test automation.

The Benefits

Symphony's superior software R&D skills helped achieve the following benefits for the client:

- Transformed the legacy web application into a sophisticated tool that saves time for end-users in their pursuit for medicate accreditation, thereby enabling high user adoption