



Symphony helped a US based ISV specializing in business management solutions for construction industry to develop an integrated Project Management Portal accessed via MS SharePoint 2007 that allows organizations to create documents and manage projects centrally and with ease.

## The Client

The client is a US based ISV delivering business management software for the public and private sector that is used by more than 1500 organizations in 23 countries. Using Microsoft technology, they provide construction software, job cost software, field service software and equipment management solutions to help manage large construction-related projects and its service operations. They focus in seven core sectors: equipment-centric, communication, construction, energy, mechanical and specialty trades, and public sector.

## The Challenges

The client had rich experience in operations of a construction services company. Their product vision was to provide effective software solution to manage large construction-related projects and service operations. The business need was to develop an online platform that allows organizations to create documents and manage projects from a central location.

The challenge was to develop an integrated project management software with customized work-flow to keep project managers updated on project status, tasks they need to complete and dates missed by others (including vendors), and help identify an issue before it becomes a problem.

## The Solution

Symphony's solution to the client included designing a web portal architecture over Microsoft SharePoint platform using custom web parts and .Net technologies. The portal was designed to be highly configurable, easy to manage applications with multi-level security access and deployable with ease.

## Custom Development

Re-engineering/Modernization

### Platform

Microsoft SharePoint

### Industry / Domain

Construction

### Engagement Key Points

- Project duration – started in 2006 and ongoing
- Ramp Up Time from SOW sign off – 2 Weeks
- Peak Team Size – 6
- Engagement model: Time and Material
- SDLC: Agile
- Release Cycle – short iterations

### Technology and Tools Used

- Microsoft Office SharePoint Server (MOSS) 2007
- ASP.net 3.0
- Windows Workflow Foundation InfoPath Form Services
- Windows services
- C#

### Major Product Features

- Single Sign-on enabled easy navigation and enhanced user experience
- A web-based Project Management Portal to keep projects on track with customized workflows, reminders and tasks
- Helps track common project related documents such as Change order logs, Correspondence, Contracts and subcontracts, Minutes of Meeting, Shop and architectural drawings etc
- Access with permission based on user groups enhanced the security



A simplified login process included single sign-on with secured user authentication. On successful login, the portal displays the company home page and lists respective project sites based on group-level user permission. Each project site provides tools to end-users to create maintain and track common project documents - such as RFIs, minutes of meeting, daily job reports, and safety meeting reviews, submittals and transmittals – as separate document libraries, lists, and KPIs.

- Simplistic usability enabled high end-user adoption

InfoPath Form Services helped to create smart forms that allowed pre-populating project site-specific information with adequate in-built form validation before submission. Industry-tailored workflows developed on Windows Workflow Foundation enabled to direct these documents to the intended recipient(s) and initiate an approval/feedback cycle specific to the type of document. Project Managers receive reminders for overdue tasks, drawings, submittals or other actions by mail notifications.

Symphony MS SharePoint team optimally utilized Microsoft Office SharePoint Server (MOSS) user interface to provide rich user interface with simple navigation thereby allowing users to execute the operations. Integration with MS Outlook enabled users to synchronize content from Project Management Portal to the project sites in Outlook and thus sustained the simplicity.

The portal has inquiry access to financial system by integration with Microsoft Dynamics (Great Plains). The portal connected to Job Cost module by custom web parts. This enabled any updates in the module to appear in Project Management Portal, eliminating the need for duplicate data entry and risk of errors.

### The Benefits

Symphony's in-depth Microsoft SharePoint expertise helped achieve the following benefits for the client:

- Optimized ROI on custom development with faster product release