

Landen Consulting Case Study: Performance Support System Architecture & Technical Design (Complex Online Help System)

The Challenge:

The client was converting a primary transaction-processing system from a legacy green-screen environment to a web-based application, and engaged Landen Consulting to help develop the context-sensitive Online Help system. The Help requirements included several complex components, including content objects that could be shared/re-used across different user types/roles, state-specific content, and a complex technical environment.

The challenge: Develop the strategy for providing Help to the end-users of the application, and design & implement the back-end Help authoring, content management, & presentation/display system that meets the client's technical challenges and provides end-users with the Online Help information they need.

The Solution:

We started the project by performing a comprehensive analysis of the software application being targeted for Help, the various stakeholders' expectations for the online Help system, and a review of the technical environment and constraints.

Our analysis uncovered several complexity factors that helped shape the requirements of the system:

- State-specific content
- Different content requirements across different user types/roles
- The need for field-level, section-level, and page-level help
- Architectural factors & constraints, including the need to serve users both inside and outside the client's firewall
- The need to interface with multiple dynamic content repositories
- An inconsistent system interface which required a flexible approach to including context-sensitive triggers for invoking/calling the Help system
- A technical environment which prevented us from using third-party Help authoring tools, and instead required us to create a customized Help authoring/development environment that leveraged both 3rd-party tools already owned by the client, as well as components developed specifically for this project

Our consultants partnered with the client's in-house technical team to devise a framework to allow the application to trigger Help pages that are customized for state-specific and role-specific content. We also partnered with the client's technical teams to devise solutions for negotiating the challenges presented by the client's infrastructure/environment. These solutions included a strategy that made use of an already-installed content management platform (Interwoven's Teamsite), custom development, the novel application & leveraging of existing technical components, and other creative technical solutions which allowed the Help solution to be assembled with a minimum of capital and resource investment.

We also devoted considerable efforts to analyzing the content authoring process, and developed an interface (custom data capture templates and workflows) and back-end infrastructure that was adapted to support the content author's unique work processes and requirements.

The Results:

The new Help infrastructure was successfully implemented (and Help content migrated to the new system) with no downtime for end users – the content-object approach that we adopted allowed the application deployment to scale rapidly upwards and gave the Help authoring team the flexibility to support a wide user base (60,000+ users) with minimal resource loads on the authoring team – this would not have been possible using the old Help system that was in place before we were brought onto the project. At the conclusion of the countrywide rollout, we had used our Help system to successfully author and publish tens of thousands of Help topics accurately and on-time, and we made numerous refinements and improvements to ensure that the Help infrastructure was optimally configured to support both the content authoring team and the Help end-users.

To position the client's in-house team for success after Landen Consulting's involvement had concluded, we partnered with the client's internal technical team to integrate the Help authoring process & components into the application development area's overall development toolset and process model.

The resulting Help system (and our robust approach to providing end-user application support) was widely viewed as setting a new standard in providing comprehensive and well-targeted support to the end user, and was adopted as the model for all subsequent application rollouts and Help systems across the enterprise. The Help architecture that we devised was used as the enterprise standard for providing in-application Help for all new applications moving forward.

For More Information:

For more information on the services available from Landen Consulting, call us at 847.604.8697, or visit us at www.landenconsulting.com.