

Enterprise-Wide Document and Application Portal

Secure Intranet Solution for Information Exchange

BUSINESS NEED

A large national I.T. staffing and solutions provider restructured their business, replacing a branch business model with a centralized model. The new business environment exposed a significant need for sharing common documents, procedures and communications to a geographically dispersed employee community. The information was in the form of documents located in file shares (primarily Microsoft® Word, Excel, PowerPoint®, and Adobe® PDF), Lotus Notes® databases, or dispersed on individual computers. Other data important to field operations personnel resided in database management systems located at the home office. In addition, data needed to be collected daily from the field organization and provided to management in the form of business dashboards that reflected trends and opportunities.

KEY REQUIREMENTS

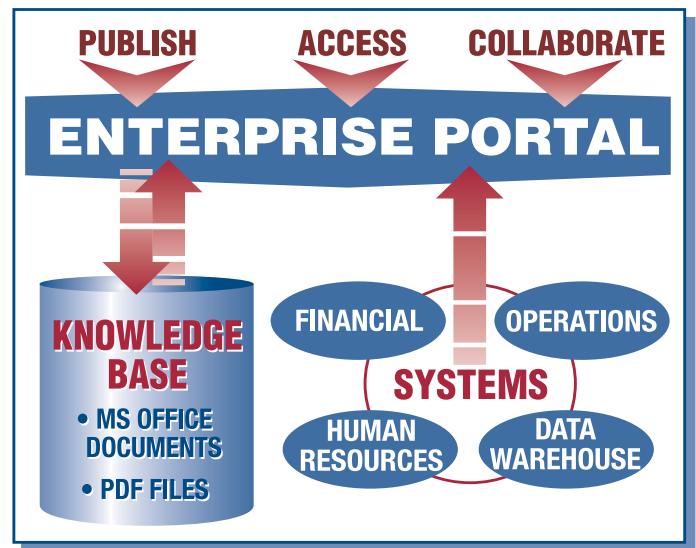
The most significant requirements were related to the organization and accessibility of the documents that constituted a large portion of the site content. Document publishing needed to occur from any workstation, whether it was at the corporate office or in the field. Furthermore, publishing restrictions were imposed, and published documents had to be approved (type dependent). Certain document categories had access (read) restriction. The content of the documents needed to be augmented by publisher-entered attributes (e.g. title, description, review date, etc.), with the attributes varying by content type.

Some content on the site was in the form of reports. In many cases, the report data was derived from transactional or data warehouse databases.

DESIGN

Most of the site content is proprietary. To maximize security, the site is deployed on the corporate intranet, accessible only from the corporate LAN, WAN and VPN. In addition, all users must log in to the application before any access is possible.

When a user logs in, their profile dictates the type of functions they can perform, and the content they can access. The system administrator controls security groups and user profiles. User authorizations are based on their job code (retrieved in real time from the PeopleSoft® HR system) and optional site-specific permissions, as defined by the system administrator. All profiles are stored in an LDAP directory.



The system is designed to organize documents by the department that owns them. Each department has a variety of unique document categories and, in some cases, sub-categories. The departments, categories and sub-categories act as one form of navigation method to locate and view documents. Alternately, both simple and advanced search functions can be used to locate documents. The simple search functionality matches user-entered key words against a full-text index of the document body, title or description fields. The advanced search provides methods of searching across document stores, and selective searching on document attributes, such as owner name or publication date. The combined navigation and search functionality makes finding documents fast and easy.

There are a large variety of reports supported by the system. Report selection is similar to the method of accessing documents, i.e. navigate to the desired report under the Report Center “department”. Some reports are published as files, e.g. Microsoft® Excel files. But the more significant reports are web applications that retrieve data from varying data sources, including transactional databases and data warehouses. The portal acts as more than just a launching pad for the report. It is the application server. The tight integration with the portal provides a seamless and efficient means to access information and manage permissions. Certain reports provide a means to direct output to a spreadsheet file for custom manipulation.

The portal also acts as a data collection system. A series of web applications were constructed and integrated into the portal. The applications ranged from simple bulletin board functionality to more business critical functions for collecting performance statistics from field personnel. The collected data is then “exposed” to management for trending and analysis.

CHARTWELL I/T ROLE

Chartwell I/T participated in the project from the early analysis stages through the implementation, rollout and enhancement phases. Chartwell I/T filled the key software architect role, performing the following tasks:

- Analyze initial business requirements and propose system architecture
- Business process review, discussion and recommendations
- Architect system and design software solution
- Leadership and mentoring of software developers
- Software development

Besides Chartwell I/T’s participation, the project team also consisted of client resources to fill the roles of project manager, software developers, web designers and business analysts.

TECHNOLOGY

The system uses Microsoft® Site Server 3.0™, a middleware product that provides the core functionality for document publishing and searching. Site Server 3.0™ runs on top of Windows 2000 Server™ running IIS 5.0. The Windows® “challenge-response” method is used for user authentication, integrating the user’s network user name and password with the portal site credentials, simplifying password management and enhancing user acceptance. Profiles and other controlling parameters are stored in the Site Server 3.0™ Membership Directory, an LDAP-compliant data store.

The Site Server 3.0™ Search Engine is used to facilitate advanced document searches. The search engine performs full text indexing of documents and attributes.

The reporting functionality integrates with back-office Oracle8i® database management systems for extracting report content. The embedded web applications within the portal used either Oracle8i® or Microsoft® SQL Server as their transactional data store.

Adobe is a registered trademark of Adobe Systems Incorporated. Lotus Notes is a registered trademark of Lotus Development Corporation. Microsoft, Windows, Windows 2000 Server, Site Server 3.0 and PowerPoint are either registered trademarks or trademarks of Microsoft Corporation. PeopleSoft is a registered trademark of PeopleSoft, Inc. Oracle8i is a registered trademark of Oracle Corporation.