

# THE SAPIENT *People* PORTAL

*A Global Solution*



## Overview

It's about enabling employees. It's about community. It's about the right partner. Microsoft. And it's about building the right solution for Sapien.

## About us

We're a global services firm that operates two groups — Sapien Interactive and Sapien Consulting. We help clients compete, evolve and grow in an increasingly complex marketplace. Sapien Interactive provides brand and marketing strategy, award-winning creative work, web design and development and emerging media expertise. Sapien Consulting provides business and IT strategy, process and systems design, package implementation and custom development, as well as outsourcing and trading and risk management services. We're also a Global Gold Certified Microsoft Partner.

## Challenge

As a rapidly growing, 6,000 + person organization, we were looking for ways to upgrade our companywide intranet experience. Particularly in the areas of Sapien processes, systems/infrastructure, team collaboration and improved information flow. People were spending too much time on internal processes and were frustrated with excessive e-mail alerts, old information on the intranet, communication channels that were broken or underutilized and an overall sense of detachment from the Sapien community.

## Solution

We chose to create an online People Portal to decrease time spent on ineffective internal processes and improve understanding, accessibility, visibility and execution. We also wanted to improve communication effectiveness by providing current, organized, reliable, relevant information. Plus, while we wanted to facilitate change management in one centralized location — we were committed to ensuring individuals could publish content without the need for a great deal of training as well. And, we strove to improve connectivity by enabling people to share data and insights on a person-to-person level across our global company.

The Portal's numerous categories and in-depth content needed to cover thousands of pages with several links available for downloads and easy access to other areas of the site. To support this immense endeavor, we selected the Microsoft SharePoint MOSS 2007 platform, because of its flexibility and advanced web content management functionality. It is a great fit for Sapien, because our IT staff are trained on and fully support Microsoft products. And with licensing already in place, MOSS is a cost-efficient solution. This consolidated, easily deployed platform helps our global company stay well informed and connected.

## Goals

To measure the effectiveness of our efforts, we looked at specific objectives. We wanted to reduce policy and process-related help desk (IT) tickets. And decrease time and effort required to edit and publish content. We also aimed to increase the immediacy and accuracy of all corporate-related content and for a spike in daily intranet usage. Finally, we wanted to improve quality satisfaction scores when it came to efficiency, ease-of-use, reliability and promoting a sense of community.

## People Portal Technical Steps

But how did we do it? The following is a snapshot of the content ultimately implemented on the website. A step-by-step look at how the People Portal came to life.

Content Objects	How Many
Custom Content Types	11
Custom Site Columns	50
Policy Pages (including all Sapient Geographies)	300
Process Pages (including all Sapient Geographies)	200
Travel Pages (including all Sapient Geographies)	250
Non-Editorial Pages (including all Sapient Geographies)	500
Other Content Pages (Company News, Announcements, Articles)	~400
Documents - PDF, DOC, RTF and other document formats	~1000
Community Sites	45

## People Portal Development Phases

### 1. CREATION OF CUSTOM SITE DEFINITION

We developed a custom site definition based on our innovative publishing site template. The site definition referenced customizations developed for the intranet.

### 2. DEVELOPMENT OF MASTER PAGES

Master Pages were developed to provide “print-friendly” views of the page and a text- mode version utilizing the following technical articles:

- > [Adding functionalities to pages by inheriting PublishingLayoutPage](#)
- > [Adding Code-Behind Files to Master Pages and Page Layouts in SharePoint Server 2007](#)

Certain SharePoint files were also removed from the Master Pages to prevent end users from downloading unneeded JavaScript and CSS files such as core.js. These files are required for content authors, but not for anonymous website viewers. Reducing the page size resulted in faster page load time, which is critical for visitors with low-bandwidth Internet connections. We utilized the following technical articles to optimize the Master Pages:

- > [How to Optimize a SharePoint Server 2007 Web Content Management Site or Performance](#)

### 3. CONTENT TYPES AND SITE COLUMNS STRATEGY

Content that is stored in SharePoint Libraries or Lists can be based on Content Types and Site Columns defined at

the Site Collection level. Content Types and Site Columns can be defined and deployed via SharePoint Features and Content Types are developed using SharePoint UI. The Content Types were grouped based upon their logical relationships. Because the project was so complex, we revised the Content Types and Site Columns several times while utilizing the following technical articles for definitions:

> [Plan Content Types](#)

> [Introduction to Columns](#)

The Site Columns turned out to be common and used across many Content Types. Some columns were also based on lookup fields to SharePoint Lists which provide a way to easily manage the values available to be selected for a column. When any new values are required, they can be added to the appropriate List and then automatically reflected in all respective Site Columns. The People Portal required over 250 custom Site Columns to support the various Content Types and Page Layouts used throughout the website.

We originally documented all the Content Types and Site Columns in the “requirements gathering” project phase. We then stored all Content Type and Site Column information in a custom List to help us manage the “schema definition and development” process because multiple people were doing the work over a period of a few months. We found that using a series of custom SharePoint Lists was better than tracking the entire process using Excel spreadsheets.

#### 4. PAGE LAYOUT STRATEGY

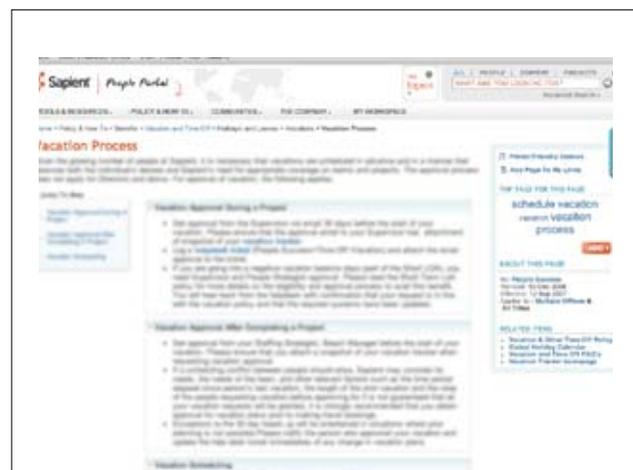
Page Layouts are page templates associated with a Content Type that define the fields of information stored within a Publishing Page. A Page Layout needs to handle multiple page modes — two of which are Display Mode and Edit Mode.

Lookup field controls were used heavily to simplify content authoring by controlling the values that can be set in various Page Fields. The Display and Edit modes are quite different for the website, so two sets of controls were

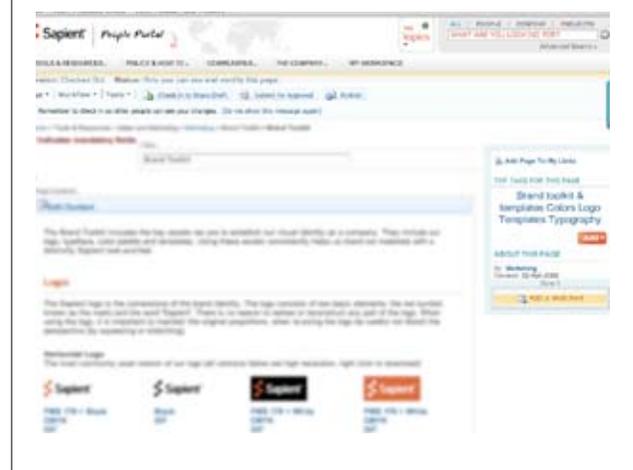
used to render the different modes for the user. You can detect the form mode by checking the SPFormContext of the current SPContext as described in the following technical articles:

> [SPFormContext](#)

> [SPContext.Current.FormContext](#)



*Edit Mode: A page with controls allowing an authenticated content author/editor to add or update data in the available Page Fields.*



*Display Mode: A typical page on the website in read-only mode, accessible by anonymous visitors.*



Layout of a community site.

## 5. COLLABORATION SITES – PLANNING

We created a custom Site template that featured:

- > A commonly shared document library
- > A default Wiki Site for every community
- > A customized blog template that could accommodate the numerous company- wide blog needs
- > The power to create new community discussions

## 6. CONTENT TARGETING FOCUS

The content entered for the People Portal was targeted to a group of people based upon the following combination of meta-info:

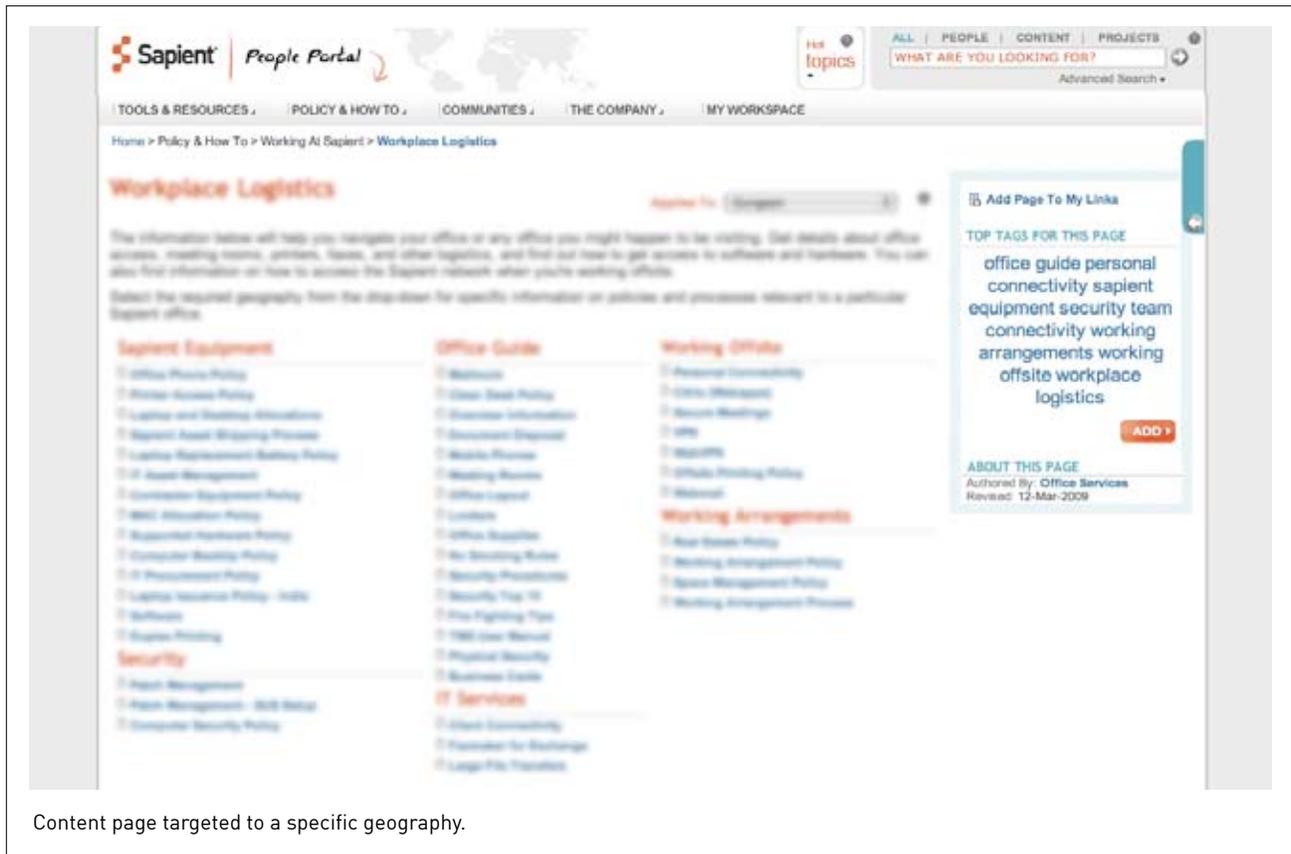
- > Company Role
- > Geography
- > Business Unit

To ensure the system displayed only relevant content to a user based upon meta-data associated with the user's profile, we settled on the following approach:

Lookup columns were created to store Role, Business Unit and Geography meta-data. Then the columns were associated with multiple Content Types. Authors could then select relevant meta-info to target content to a specific group of people.

Custom webparts were written using the CAML query to fetch published content across the site based upon logged-in user needs. Relevant content was then displayed.

Multiple SharePoint audiences were created to target content based on individual preference. In effect, the user was allowed to choose any community of interest. As soon as the community was added to his or her favorite list, the user's name was added automatically to that community audience group. This allows the user



to receive all community alerts on his or her home page.

> [Details about Sharepoint.](#)

## 7. CONTENT MIGRATION PROCESS

We worked hard to ensure the migration of content from the old to the new website went smoothly. Not only did HTML/text content need to be migrated, but so did hundreds of images and thousands of documents. In addition, hyperlinks also needed to be updated to reflect their new paths in SharePoint document and picture libraries. We made three key discoveries during the migration process:

> *Data migration method depends a lot on the source system — for instance, access to an API or the source database*

> *Migrate content into MOSS 2007 Publishing Pages if you want content authors to have the ability to edit that content in MOSS 2007*

> *You can optionally integrate other systems via web service APIs or custom SQL Server databases*

We also discovered that data migrations into a new system never work completely the first time. That resulted in the need to run migrations many times with incremental bug fixes and other adjustments until all content had been correctly migrated. It was also imperative to go back and validate that the Content Types and Site Column schema of the new website had been defined correctly to accommodate the migrated data. The extra steps were necessary and rewarding.

## 8. WEBSITE FUNCTIONALITY OPTIMIZATION

We implemented menu navigation, page content navigation and search navigation with custom server controls or web parts.

Custom menus were developed with the MOSS 2007 Publishing Navigation Providers used as a data source so that the menus would be configurable via the built-in Modify Navigation feature. Field controls were utilized so that page

content could be edited and page-level settings configured. Several Page Layouts were outfitted with custom Adobe Flash Field Controls, which allowed content authors to embed Flash-based multimedia content in the pages.

## 9. CONTENT SEARCH SUPPORT

Search was a high priority because of the large volume of content and the complexity of Content Types with many attributes per document or page.

SharePoint's Enterprise Search capabilities provide keyword search across many varying sources of content such as pages, documents, databases and more. Developer documentation for SharePoint Search can be found at:

> [Querying Enterprise Search](#)

To implement Search against data stored in SQL Server databases, we used custom developed procedures. In addition, we employed CAML queries for advanced page content searches and paging was executed with SPGridView to optimize the performance of queries.

We controlled the number of items returned from CAML queries by specifying a number for the **RowLimit** property of **SPQuery**. SPQuery also has a **ListItemCollectionPosition** property that is used for controlling paging of CAML queries.

## 10. ORACLE INTEGRATION

An Oracle HRMS system is the system of record for much of Sapient's employee data, with Active Directory primarily being used for access and authentication. Therefore, it was necessary to integrate with the Oracle HRMS to retrieve employee information for the personal profile pages.

We wrote a custom data feed from the Oracle HRMS system for the SQL Server custom database to capture relevant data. The feed was scheduled to run once per day to refresh the SQL DB, and some user data was synced between Oracle and SQL Server 2005 DB in real-time like user phone numbers, locations etc. An EAI layer was written to generate the events from Oracle and get the feed into SQL server DB. And a

publisher, subscriber architecture has been implemented for a real-time sync between Oracle and SQL Server.

## Conclusion

Ultimately, we created an integrated, comprehensive People Portal that connects our company globally. With this open communications forum in place, our people can do their best work, be better informed about company issues and stay up-to-date on information that matters to them.

Specifically, we reduced the time spent on key internal activities and the number of helpdesk ticket requests. We increased efficiency, ease-of-use and satisfaction scores as well. Importantly, usage went up: An average of 2500 people now log on to the People Portal every day and nearly all of our 6000+ people use it at least once per week.

We partnered with another industry leader, Microsoft, to make it happen and used the perfect platform — MOSS 2007. Sapient linked thousands of pages of critical content that were both new and existing to maximize the experience. Now we're reaping the benefits including enhanced flexibility, more efficient communications and a great customer experience. The MOSS platform was more cost efficient than we originally estimated and we look forward to enhanced ROI and high value for our internal clients.

## People Portal Results

Based on Sapient employee surveys:

> 97% aware of the People Portal

> 92% visited the People Portal

Frequency of visiting the site:

> Daily or more than once per day – 36%

> Weekly or a few times per week – 42%

> Few times per month – 19%

> 44% go to the People Portal when sent a link

> 59% use the People Portal when seeking information

## People Portal vs. former Sapient intranet

	<i>Better</i>	<i>About the same</i>	<i>Worse</i>
Find information	59%	36%	5%
Site organization	70%	24%	5%
Content quality	56%	41%	3%
Functionality	59%	34%	7%
Collaboration	49%	49%	2%
Overall	69%	27%	4%

