Microsoft SharePoint Implementation

SharePoint, as actually implemented, almost defines a service-oriented architecture (SOA). That's because every successful implementation of SharePoint is customized to the business process and business logic of the company we're installing it for. But that in turn means that successful implementation depends heavily on input from stakeholders in the company, including and especially end users. The purpose of SharePoint, ultimately, is to allow enterprise content to be managed, accessed, shared, developed, built on, and used to advance the company's goals more efficiently and creatively.

It's no surprise, then, that the two SharePoint capabilities Coyote Creek is most often called upon to implement are intranet portals and custom integration with what SharePoint defines as external content types (ECTs) via Microsoft Business Continuity Services (BCS) and, as needed, custom connectivity solutions. We also often implement extranets, whether for remote or satellite offices, subcontractors, or corporate collaborators and customers.

What our clients typically want most from SharePoint, though, is to enhance collaboration within and between teams and work groups, document sharing and management, and workflows. But that also means that unless a SharePoint implementation actually engages employees so that they use it to enhance their productivity and modify it to meet evolving needs, its potential will not be realized as ROI.

Getting that right requires careful planning, testing, revision, and an adoption strategy. Also, on the business end, building a stable and inclusive governance structure for SharePoint is critical to its ongoing benefit to the company. Because Coyote Creek's founders and lead engineers have wide and deep experience in enterprise IT, we understand that companies, finally, are made of people—individuals and groups—with their own distinctive needs, attitudes, and relationships. When we work with you to implement SharePoint, we take the human factor fully into account. Our success as well as yours depends on it.

Stakeholders

To begin with, key company stakeholders need to be identified and brought together. These typically include:

- the company CIO and/or another Executive Sponsor to help drive the process and ensure accountability
- network administrators (SQL, Web Server, .Net, etc.) for integration needs assessment and planning
- corporate communications staff (writers, designers) for communications needs assessment and portal-building
- developers (for custom integration)
- line managers and team/work group leaders to provide input on collaboration and workflow needs and access requirements
- other end users (including extranet users) to provide feedback on pilot-phase solutions

Questions for the Client

We'll put these and similar questions at multiple stages, because SharePoint implementation isn't a single, straightforward 1-2-3. It's an iterative process involving repeated testing and correction not only of technical functionality but of utility and adoptability to users. Here are some questions we start with:

- What hardware infrastructure is available, and what if any additional hardware is needed?
- What enterprise content needs to be managed? Where is it? Who keeps it?
- What features and functionalities should be included in the enterprise portal and in intranet portals (for departments such as HR and Accounting, development teams, and work groups)?
- What LOB information needs to be integrated via BCS (see below)?
- What tools are currently available for integration? What custom solutions are needed?
- Extranet: Who is it for? What sorts of access functionalities do they need?

Planning

Proper planning is always important in software implementation, but it's especially crucial for SharePoint. The answers to the questions above and the stakeholders who provide them provide the elements of the plans. The outputs from the planning process should include topologies (of server roles, for instance), resource requirements, implementation components (such as needed portals and site taxonomies), identified process drivers in the organization, and phased development targets. The key plans to be created are the following:

- Governance Plan
- Development Plan
- Integration Plan(s)
- Adoption/Rollout Plan and Framework

We'll address each of these in turn.

Governance Plan

Here are the key stakeholder groups we believe need to be involved in SharePoint governance:

- Knowledge Management
- Corporate Communications
- IT (Business Analyst/Information Architect for the Portal Project team plus a representative from Information Security)
- Human Resources

And here are some of the kinds of questions that the governance group, working with Coyote Creek, will need to address:

- Who is responsible for technical management of the environment, including hardware and software implementation, configuration, and maintenance? Who can install new Web Parts, features, or other code enhancements?
- Which social computing features do you want to deploy?
- Who will be responsible for setting up new sites within the existing hierarchy/taxonomy? If this responsibility falls to the IT department, then IT will likely need to negotiate a service level agreement (SLA) with the business stakeholders. If it is delegated, users will need training to ensure that they follow acceptable conventions for naming, storage, and so on.
- Who has access to each page or site? Who can grant access to each page or site?
- How much responsibility for page or site design will you delegate to page owners? Can users modify Web Parts (Web-based data and UI components) on pages they own in team sites? Can they modify Web Parts on pages that are part of the corporate intranet publishing solution?
- Who is responsible for managing metadata? Who can set up or request new Content Types or Site Columns? (Content Types and Site Columns allow you to specify elements in your taxonomy.)
- How will the Governance Model be updated and maintained?

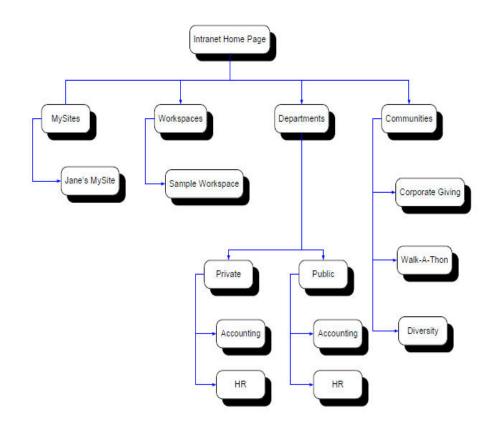
As will be obvious, the Governance Plan can't be set in stone. It has to be a living document that is continually updated and revised in accordance with experience and evolving enterprise needs.

Development Plan

Your SharePoint solution will need to be developed through these steps:

- Initial development, testing, and evaluation
- Proof of concept
- Pilot (small-scale test)
- User acceptance test
- Deployment

A key part of the development plan is the establishment of basic taxonomies, like this one:



This yields a URL structure like the following:

Intranet.company.loc

- Intranet.company.loc/mysites
 - _ Intranet.company.loc/mysites/janesmysite
- Intranet.company.loc/workspaces
 - _ Intranet.company.loc/workspaces/sampleworkspace
- Intranet.company.loc/departments
 - _ Intranet.company.loc/departments/private
 - Intranet.company.loc/departments/private/accounting
 - Intranet.company.loc/departments/private/HR
 - _ Intranet.company.loc/departments/public
 - Intranet.company.loc/departments/public/accounting Intranet.company.loc/departments/public/hr
- Intranet.company.loc/communities
 - _ Intranet.company.loc/communities/corporategiving
 - _ Intranet.company.loc/communities/walkathon
 - _ Intranet.company.loc/communities/diversity

Working from a basic taxonomy like this one generates a coherent, scalable site and page structure.

Integration Plan(s)

To be really useful, a SharePoint solution needs to fully integrate enterprise content. Microsoft has positioned SharePoint 2010 to be the command center from which you can find, view and edit information stored not only in SharePoint but also in many line of business (LOB) systems. So systems integration is critical in SharePoint projects. Luckily, SharePoint offers some great tools to communicate with LOB systems. The most important of these is Microsoft Business Connectivity Services (BCS).

BCS functions as a broker between LOB systems and SharePoint. Using it, SharePoint can perform both read and write actions to your company's LOB systems. To let the BCS know how to interact with a given LOB system, we create an *External Content Type* (ECT). Essentially, an ECT is a reusable data definition of a business entity—a metadata type. An ECT defines the schema and operations to perform on the LOB data.

After an experienced user or a developer creates an ECT, it is available to any SharePoint user to use in any way they need (provided they have the permissions to perform that operation and access the external data). However, the user does not need to know anything about the location of the external data or how to connect to it.

Probably the most crucial element of an integration plan for most of our clients is *analytics*, whether via SQL Server or another DBMS. Sources of LOB data that will need to be accessed as ECTs in SharePoint include the following:

- ERP/ERM (the software that manages your company's assets and resources, including general ledger, accounts payable and receivable, as well as manufacturing, inventory, and human resources)
- CRM (the software your company uses to organize, automate, and synchronize sales, marketing, customer service, and technical support)
- Business Intelligence (including multidimensional analytics)

Microsoft offers tools that integrate well with SharePoint, including SQL Server Reporting Service (SSRS), which facilitates customizable reports from SQL Server; and the powerful SQL Server Analysis Service (SSAS), whereby users can bring together data from multiple relational databases into a SharePoint site, enabling them to query the data, view it at various levels of detail, perform advanced calculations against it, and mine it in sophisticated ways. We also use third-party connectors from well-known companies like SAP and SalesForce or design custom solutions for specialized needs or especially complex integrations.

Adoption Plan

Once a governance group has been established, the various elements of the custom implementation have been developed, and integration has been mapped out, the all-important

goal is to ensure adoption of the solution by employees. Individual users and user groups will have already been involved in testing pilot versions of solution elements and then in user acceptance testing. Here are some key adoption-plan elements Coyote Creek work with you to develop, as needed:

- Training Plan
- Communications Plan
- Content Migration Strategy
- User Support Plan

We also recommend that your company provide adoption incentives and rewards and enable honest end-user feedback.

But none of these plans will work if the SharePoint solution isn't easy to use and doesn't yield the information users need. Here are some essential elements of the solution we'll help you design that will facilitate user adoption:

- Information Architecture (including content and navigation organization and branding)
- Search (so users can find what they are looking for via both search and navigation)
- Term Store (for easier tagging and improved search results)
- User Profiles (to leverage the social aspects of SharePoint to your advantage)

The Takeaway

SharePoint is big, powerful, and complex. But if implementation and adoption are planned and executed correctly and carefully, SharePoint can be of enormous benefit to your organization—enhancing collaboration, streamlining workflows, enabling LOB data access and analysis, reducing duplicated or misdirected effort, and improving internal as well as external communications. At Coyote Creek, we know how to help you plan, develop, and implement the SharePoint solution that's right for your company.