The Integral Worm's (TIW) SharePoint 2010 Implementation Solution

Our SharePoint service offerings include:

1. Assessment and Roadmap Analysis

Before starting a SharePoint effort, TIW engages with our clients to gain a firm understanding of their operations, business needs, and requirements. We perform a SharePoint 2010 Readiness Assessment and Roadmap Analysis that includes the following key activities and deliverables, tailored to meet our client-specific requirements:

Assessment of Current IT Infrastructure

We perform an examination of the general IT infrastructure consisting of Configuration Management, Security, Network Topology, and Active Directory.

SharePoint Infrastructure Recommendations and Implementation Roadmap

TIW provides detailed recommendations for preparation, adoption, or migration to SharePoint 2010 along with a roadmap detailing necessary prerequisites.

SharePoint Best Practices Recommendations and Adoption Roadmap

We implement SharePoint best practices from a business process, governance, and technological perspective in preparation for installation including recommendations on how to best adopt and gain value from new capabilities and features made available in SharePoint 2010.

Define Measurable and Traceable Requirements

Requirements are compromised of the following: formally documented and written statements; capabilities needed to solve a problem; conditions of a delivered system, service, product, or process; constraints on the system, service, product, or process. TIW proceeds through four steps in order to define measurable and traceable requirements.

Business and End-user Requirements Development

TIW understands that a common problem with requirements development for SharePoint Implementations is initially focusing on the system requirements or technical requirements versus focusing on the business requirements. In order to avoid this common mistake, TIW SharePoint Business Analysts focus on the client's business first by creating a Business and End-user Requirements Development Process.

First, our SharePoint Business Analysts focus on defining the client's business needs or "frustration points," such as sending document revisions through email until no one can identify which document is the latest version.

Second, they focus on defining business requirements that describe and justify the high-level business functionality.

Third, they focus on defining the user requirements that identify what the system must do from the user's perspective.

Last, our SharePoint Business Analysts focus on defining system requirements that define the desired characteristics of the system and properties that the system must have.

In order to elicit information from the client and the users to develop the business requirements, our SharePoint Business Analysts use the following methods: brainstorming, document analysis, focus groups, interface analysis, stakeholder interviews, workshops, surveys, user task analysis, and process mapping.

When our SharePoint Business Analysts have completed defining the business and user requirements, these findings are turned over to the SharePoint Systems Engineers so they may begin the process of defining the functional and technical design plans. By thoroughly defining the business and user requirements, TIW can trace and measure how a specific system requirement is linked to a business requirement in order to validate that SharePoint will address the client's business needs effectively.

2. Systems Design

TIW uses the industry standard iterative technique when developing functional and technical requirements.

Functional Design

Within the functional design phase, TIW SharePoint Engineers design the system according to the business needs of the client using company terminology. Next, they create a blueprint of the system depending on what the client wants. Common input for the design architecture are the use cases, use case scenarios, functional requirements, non-functional requirements (including quality attributes such as performance, security, reliability, amongst others), behavioral requirements, technological requirements, and operational requirements.

Technical Design

During the technical design phase, our SharePoint Engineers create a technical blueprint that lays out the technical requirements to fulfill the tasks of the functional design phase. The functional design inputs are decomposed into subsystem technical requirements as part of the architecture design. The technical requirements are further decomposed as classes and modules. Once the technical requirements are decomposed as classes and modules, prototypes will be developed to show the stakeholders how the system works, key technical risks will be identified, testing potentials will be noted and models will be refined. The design documents will be developed, peer-reviewed, and will be subjected to several layers of internal review before the client signs off. Based on the needs of the task, the design documents may consist of charts, models, screen shots, database field mappings, and requirements traceability matrices. Once the implementation of a segment is done, the next iteration of the architecture design starts again.

3. Execution

Our SharePoint team helps organizations with migration or upgrading from existing applications, installation and configuration of SharePoint site, creation of custom business workflows, management of intranet and extranet websites, SQL server reporting, integration and analysis, dashboard creation, SharePoint site branding, and business process automation implementation.

Implementation

At TIW, we know that an in-depth understanding of the complexities of Microsoft SharePoint Server is only one of the keys to a successful implementation and improved communication within an organization. Our SharePoint implementation experience is the foundation for our work. We combine this knowledge with our understanding of the vital roles that project management, business analysis, and training experience play. TIW brings this knowledge to all client engagements where they quickly recognize the benefits in working with our team of SharePoint experts.

TIW has a track record of delivering high-quality solutions for the client. Success of a complex technology project depends upon a well-defined process of detailed development and implementation utilizing a highly capable and disciplined team. TIW's well-defined quality assurance process scrutinizes the project before going live. To provide best ROI to clients on their investments, it is critical to scrutinize the process and personnel before deploying the capital. TIW has perfect blend of Business Analyst, Business Intelligence (BI) Consultants, Project Managers, SharePoint and .Net Developers, Creative User Interface (UI) Designers, Quality Assurance Engineers, and Trainers. Our people and process ensure the successful engagement with our clients. The table below shows a high level TIW SharePoint Implementation methodology.

Stage 1

- Education and Awareness
- Project Identification
- Requirement Mapping
- Planning

Stage 2

- Requirement Mapping
- System Analysis
- Installation and Configuration
- Verification and Validation
- Training
- Go Live

Stage 3

- Support
- Monitor
- Evolve

Upgrading

Organizations that have deployed an instance of Windows SharePoint Services 2.0 and 3.0, SharePoint Portal Server 2003, and Microsoft Office SharePoint Server (MOSS) 2007 sometimes desire to change platforms without losing all of the lists, libraries, permissions, web parts, and metadata detail they have built into their existing SharePoint system. TIW's upgrade process to SharePoint 2010 delivers support for gradual upgrades, granular migration, content reorganization, in addition to 32-bit source systems and even direct migrations from SharePoint 2003. The upgrade process assists organizations in quickly taking advantage of SharePoint 2010's new features without putting their valuable content at risk.

Migration

Many organizations today have enterprise solutions built on older Microsoft technologies such as SharePoint 2003 or Content Management Server 2002, and others have solutions built on competitive products such as Documentum, Plumtree, AquaLogic, or Lotus Notes. Clients operating with legacy applications continue to face the risk of losing support with a very limited developer community while struggling with limited features and OOTB capabilities. Organizations are also looking to capture the business value of consolidation on the Microsoft technology stack.

As a result, demand for migration from other systems to Microsoft SharePoint continues to grow as the platform becomes the standard for organizations seeking a core set of knowledge repositories and collaborative workspace capabilities.

4. Customization

When developing a SharePoint solution, it is important for the SharePoint User Experience (UX) to be intuitive, attractive, and representative of the organization's brand and professionalism in order to drive its action and adoption. TIW SharePoint customization provides UX design and customization services to supply organizations with a unique brand identity and experience throughout their SharePoint portal or SharePoint public website.

5. Testing and Refinement

Whether the plan is to implementing or upgrade SharePoint, our SharePoint specialists follow industry best practices for software testing. TIW performs unit testing and refinement, in addition to system testing and refinement.

During the testing phase, TIW reviews the production SharePoint environment with the client to ensure that criteria from the roadmap and deployment plan have been met and that all desired functionality within the scope is present. TIW also performs a post deployment analysis and ensures that all features and functionality are working properly, that all migrated data is intact, and finally to ensure that the client has a solid foundation from which they can continue to build and expand upon for future phases.

During the Unit Testing Phase, our testing personnel utilize TIW's Unit Testing Methodologies consisting of three styles:

1. **White Box Testing –** TIW's tester constructs a test suite which demonstrates that all branches of the TIW SharePoint solution have been executed during the testing process.
2. **Black Box Testing –** Our tester verifies that each unit is implemented according to functional specification.
3. **Heuristic/Intuitive Testing –** The tester separately reviews a module, categorizing and justifying problems based on a short set of problem solving techniques called heuristics.

TIW's unit testing methods increase the quality of the code (fewer bugs), and reduce the delivery time and effort needed for subsequent projects.

During the System Testing Phase, TIW tests the SharePoint system as a whole to check and remove any errors or bugs ensuring that all processes work correctly in supporting the client's business functions. As a part of the System Testing Phase, TIW will conduct tests ranging from usability to reliability on a regular basis to ensure the sustainment of applicable Training Resource Model applications.

6. Business Intelligence

Business Intelligence is the most fascinating feature of SharePoint. This feature helps clients with quick decision-making. TIW can assist with building highly competent reporting tools that will provide an organization with scalability and precision. We assist clients in understanding and creating rich BI dashboards that include visual graphics, summaries, and charts that assist clients in making quick business decisions.

In order to continuously thrive and grow, organizations constantly need the latest and most comprehensive information to make critical business decisions—otherwise known as business intelligence. TIW has the tools and capabilities to provide you with a sound Business Intelligence environment in order to make those important decisions rapidly and competently. We provide you with results that are easy to comprehend at the touch of a button.

TIW offers SharePoint Business Intelligence services including – reporting, analytics, self-service dashboards, data integration, data mining and warehousing, amongst other services. Our Business Intelligence solutions utilize Excel Services, SQL Server, and SharePoint capabilities in order to integrate with the client's existing infrastructure. Our solutions assist clients with the following:

- **Improve financial decisions** by providing focused information through the use of dashboards providing scorecards, key performance indicators (KPIs), and trend analysis, beyond monthly reports
- **Enhance operational processes** by integrating various production and operating metrics across systems to ensure sustainability
- **Capitalize on opportunities** to analyze targets, forecasting, promotions, and usage patterns
- **Improve overall IT efficiency** through analysis of adoption, usage, and analytics to develop corrective measures

With our expertise in SharePoint and data integrations, we provide innovative solutions that help clients gain insights in order to maximize the benefits from organizations business systems and data. TIW's Business Intelligence solutions consist of the following:

- Business Intelligence and Data Warehousing implementations using SharePoint
- Business Intelligence and Data Mining Solutions
- SharePoint Business Intelligence with SQL reporting services, analytics, score cards, portals, and business specific dashboards
- Enterprise-wide Business Intelligence offerings for Data Management, Metadata Management, Taxonomy Structuring, Data Quality Management, and Knowledge Management
- Performance Management solutions using SharePoint Performance Point Services to manage KPI's and critical targets
- Operational and IT dashboards for optimizing operational processes using SharePoint and SQL server integrated to existing Enterprise Resource Planning (ERP) systems with data warehousing functionalities

7. User Training

TIW understands that a client's first objective in providing software training for end-users is minimizing any productivity losses associated with a software transition. This means it is vital to the functioning of the organization to, as quickly as possible, get the end-users up to the skill level required to do their jobs at a minimum as quickly and accurately as they were with the old software (or manual methods).

Of utmost importance is to be realistic about the timeframes in which the organization intends to accomplish the aforementioned objectives. These timeframes will be dependent on the complexity of the new SharePoint system as well as the number of users who need training and their beginning skill levels. Upgrading to a new version already being used can present special challenges. Training might be expected to proceed more quickly because users are already familiar with a previous version of SharePoint. However, if there are many changes in the new version or if the software has a very different interface, users may actually find an upgrade more difficult than switching to a completely new software package because of their existing expectations. The difficulty in training is that not all end-users have the same computer skills. This is why it is imperative to plan an end-user training strategy before roll out of new software, and making sure the training plan is scalable permitting grow with your organization.

Setting training goals

Your first objective in providing software training for end-users is minimizing any productivity losses associated with the software transition. This means you have to, as quickly as possible, get them up to the skill level required to do their jobs at least as quickly and accurately as they were doing with the old software (or manual methods). Then in the next phase, you want the software to help users do their jobs more quickly, accurately, and/or securely than before.

It's important to be realistic about the timeframes in which you expect to accomplish these objectives. These timeframes will be dependent on the complexity of the new software as well as the number of users who need training and their beginning skill levels. Upgrading to a new version of the same software already being used can present special challenges. Training might be expected to proceed more quickly because users are already familiar with a previous version. However, if there are many changes in the new version or it has a very different interface (such as the "ribbon" in Office 2007 that will replace the menus and toolbars users are familiar with in previous versions), users may actually find an upgrade more difficult than switching to a completely new software package because of their existing expectations. Remember that all software packages aren't created equal, and neither are all users.

Assessing end-user needs

An important element in creating your training plan is to evaluate the technical skill level(s) of those who will actually use the software on a daily basis. Some software, such as a new desktop operating system, may be rolled out throughout your entire organization. Some application programs may be installed only in a particular department (such as accounting software in the finance department or illustration software in the graphic design department) or only made available to employees with specific roles (for example, secretaries or department heads).

In many cases, software end-users are not particularly technically savvy, but you may have different technical skill levels within a group. It's important in that case to provide different levels of training. Technical novices will need more focused, step-by-step instruction in basics, whereas more skilled computer users will quickly pick up the basics and benefit from more training that shows them how to use more obscure or advanced features of the software. Attempting to train the two groups together will result in the novices being overwhelmed and confused and the more skilled users wasting time that could have been spent doing their work.

Training delivery methods

The next step is to assess methods of delivering the necessary training. Again, there are several factors to take into consideration:

- User skill levels as determined by your needs assessment
- Number of users to be trained
- Timeframe for rollout of the software (and whether you'll be doing it in phases or throughout the entire organization at once)

There are several different methods for delivering training, and you may want to use a combination of these, especially in a large organization. The least effective is, unfortunately, the one used by most small organizations and many larger ones: the IT equivalent of throwing the kid in the water and letting him sink or swim. Suddenly the new OS or application appears on the end-user's computer, perhaps with a copy of the manual, and it's up to the user to figure it out and the company's IT support desk to untangle the messes the user gets into. Some better training methods include:

- **Individual hands-on instructor--**An instructor walks each user individually through the process of performing common tasks and answers questions. This is the most expensive method, although potentially the most effective.

- **Hands-on classroom style instructor-led training--**An instructor shows users how the software works and how to perform common tasks, with users performing the tasks themselves in a classroom/lab setting. Each user or pair of users has a computer on which to practice. Classes of 15 to 30 are often effective.

- **Seminar style group demonstration--**An instructor shows users how the software works and how to perform common tasks in a live demonstration. Groups of 20 to 50 are often effective.

- **Computer Based Training (CBT)--**CD-based or online (Web-based) self-paced training which allows end-users to complete interactive lessons that walk them through the processes of performing common tasks, and the software tests them on their performance and understanding.

- **Book-based self-paced training--**End-users complete workbook lessons in how to perform common tasks, often illustrated with screenshots.

Whichever delivery method(s) you choose, it's helpful to first conduct a pilot training program of a small, selected group of users that best represent your overall user base. This will help you to identify problems and issues with various training methods before committing to one.

Creating a training program

End-user training is more effective and memorable if you tailor it to your own organization's use of the software, rather than generic lessons. For example Microsoft Word instruction should include examples of actual templates that your users will be using for their documents. Some elements of your lesson plan should include:

- The purpose of the software

- Tasks the user will complete with the software

- How it differs from previous versions or products it’s replacing (if applicable)

- Common problems users may encounter

- Security issues related to the software

Making your training program scalable

A scalable training program is flexible enough to accommodate both small numbers of users (for example, when new employees join the company and need to be trained on the software) and large numbers (as is necessary in an organization-wide rollout of a new product).

You can get many of the benefits of individualized training without the high cost by using a combination of computer-based training and seminar-style training where users can ask questions and practice the skills with guidance from an instructor. CBT has the advantage of being able to scale up or down depending on the number of users you need to train, and users are able to proceed at their own pace, rather than having to keep up with or being held back by the rest of the class.

In order to assist organizations who are either transitioning to the latest version of SharePoint or implementing SharePoint for the first time, the TIW Training Department is capable of developing all-inclusive training modules that will ensure that all end-users have the proper knowledge to fully utilize the capabilities of an TIW SharePoint solution.

7. Tier 3 Support

TIW Tier 3 Support operates the SharePoint infrastructure, including discovering the root causes of incidents and optimizing performance. Our Tier 3 Support provides the necessary SharePoint-specific knowledge base and resolution instructions, in addition to providing training on general resolution and response processes for our SharePoint solutions.

The SharePoint Tier 3 Support team handles incidents that require detailed investigations that go beyond basic monitoring and analysis of performance counters and event log entries to include more low-level analysis of dump files, SQL Server query profiling, and IIS memory usage.