SharePoint - a Development Platform

Chella Palaniappan
Trigent Software
SharePoint as a platform - Developers get speed and flexibility and users get self-service and control

Traditionally SMBs and enterprises alike have used Windows .NET, SQL Server as custom application development platform. As the characteristics of modern applications have changed and the time available to build them has shrunk, a more flexible and multi-faceted development platform is required by a variety of application needs.

There is a substantial amount of investment that departments have made in building solutions at their level, without proper processes. These applications, over a period of time proliferate, increase in usage and pose severe IT risks. IT and business departments continues to be somewhat at opposing ends, one wanting control and other wanting empowerment. SharePoint 2010 can be a development platform that provides a balance between self-service and control.

SharePoint 2010 is a rich platform for building custom collaborative web applications:

Rapidly create solutions without code: SharePoint 2010 provides a rich set of building blocks to create collaborative solutions that use dashboards, web forms, enterprise data and workflows. Business users can create these solutions without writing code.
Layered Development Platform: As expected of any modern platform SharePoint 2010 provides layers of building blocks. At the storage layer, data and unstructured content can easily be persisted at SharePoint stores. Business Connectivity Services (BCS) provides a way to store Lines of Business (LoB) data. On the services layer, sites, navigation security framework, lists, web parts, etc using Windows server technologies such as .NET framework and IIS provide a strong applications services. These services can easily be consumed through REST APIs. On the access control layer, SharePoint groups and integrated Active Directory provide for enterprise level security. For the presentation layer, SharePoint 2010 provides JavaScript and Silverlight for rich application development. Furthermore, Office applications can also act as the clients for deeply integrated user experience.

Easy Access to Enterprise Data: Much of the up-to-date, business critical data lives in the Lines of Business (LoB) systems. SharePoint 2010 provides Business Connectivity Services (BCS) that allows applications to securely read and write data to the LoB systems easily from SharePoint environment as external lists. Through secure store services for the BCS, data access is controlled through the organizational level access privileges and security of business critical data is maintained.

Governance and Control of the Applications: SharePoint 2010 allows IT team to maintain the control of the applications that are built by the business users. Applications can be sandboxed while under development and testing, and resource limits can be set including CPU consumption to prevent against runaway processes that will affect other services on the system.

Improved Development Tools: Power business users can utilize tools such as SharePoint Designer to design forms, create and edit BCS entities, lists schemas, custom actions etc. Business users can easily create / edit web pages, embed web parts in them, design custom workflows, etc. Administrators can still control the usage of the SharePoint Designer to prevent any wide spread impacts on the deployment.

Rapid Application Development and Increased User Adaptation: Since applications can be easily built by business users and tried out by expanded group of users, SharePoint 2010 lends itself to rapid application development methodologies, including Scrum. As users are directly involved in building the application, the adaptation is much quicker and larger.

Personalized Applications: With appropriate use of web parts, applications can provide a great amount of end user personalization. Users can select different views, grouping, etc to suite to their unique needs.

In summary, if you need to rapidly build people-centric, collaborative, composite web applications covering both structured data and unstructured content, then SharePoint 2010 is a great choice of application development platform.

Please contact Trigent to discuss how your organization can use SharePoint 2010 as a development platform for your application needs.
About Trigent Software Inc.

Trigent is a privately held, professional IT services company and a Microsoft Gold Partner with its U.S. headquarters in the greater Boston area and its Indian headquarters in Bangalore. We provide consulting services in various technologies including Microsoft Solutions. Our operating model is to conduct sales, customer relationships and front-end consulting (e.g., business case, requirements, architecture) onsite with our clients and perform the detail design, development, integration, testing and quality assurance offshore at our world class development and support center in Bangalore. We are a SEI CMM Level 4 company and is ISO 9001:2000 TickIT certified organization.

For sales contact sales@trigent.com or call 508-490-6000.