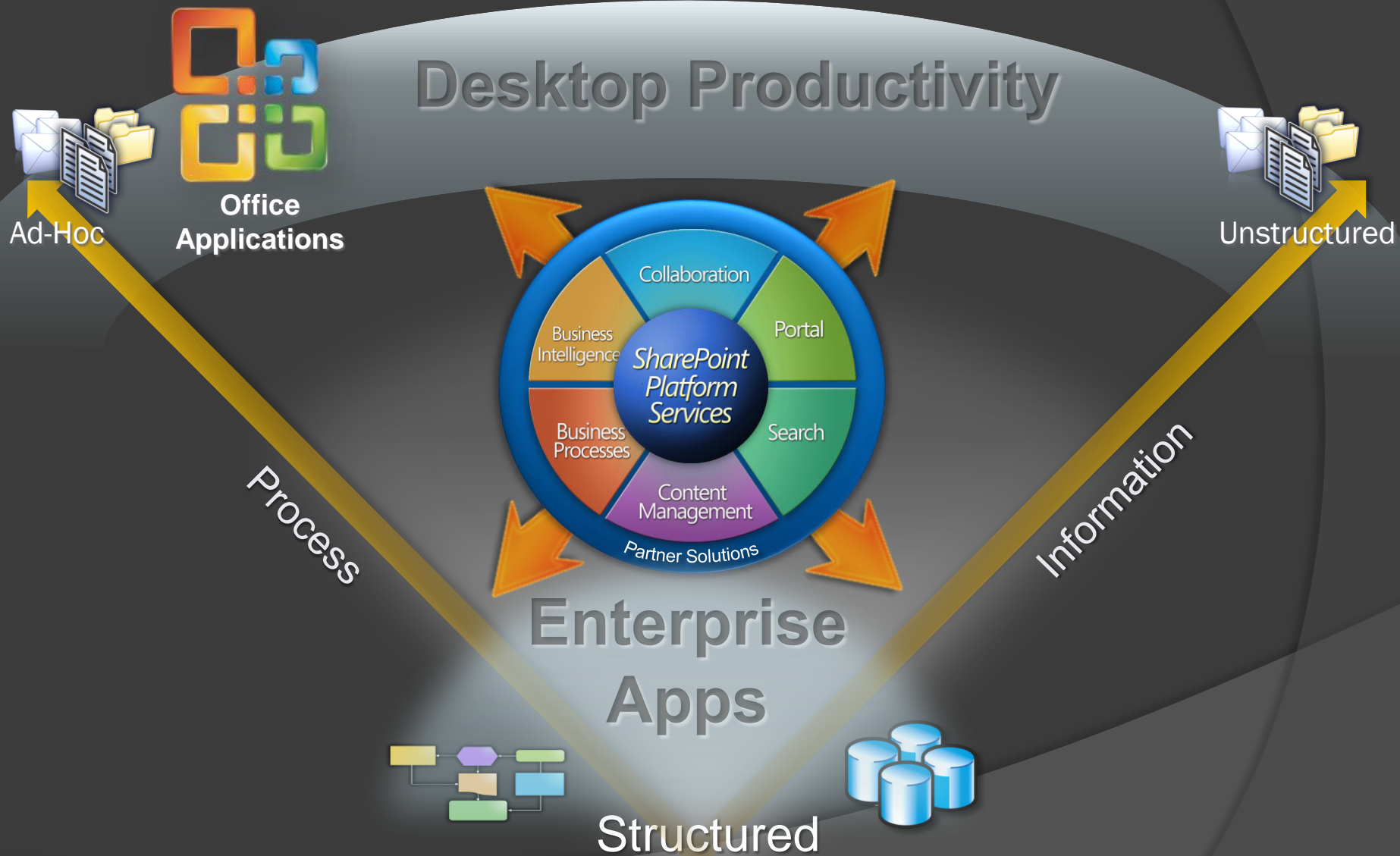


Matt Smith

SharePoint TSP Heartland District

SHAREPOINT DEVELOPMENT

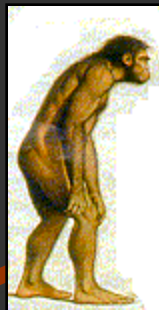
Where Does SharePoint Fit?



Evolution of the Office Developer



Word Macros

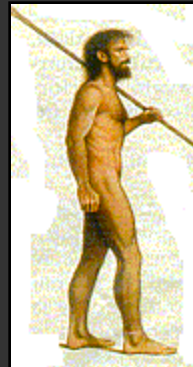


Excel Formulas

Access Macros

Word Basic

Access Basic



Visual Basic for Applications (VBA)

COM components

COM Add-ins

.NET Framework

.Managed Add-ins

Smart Tags

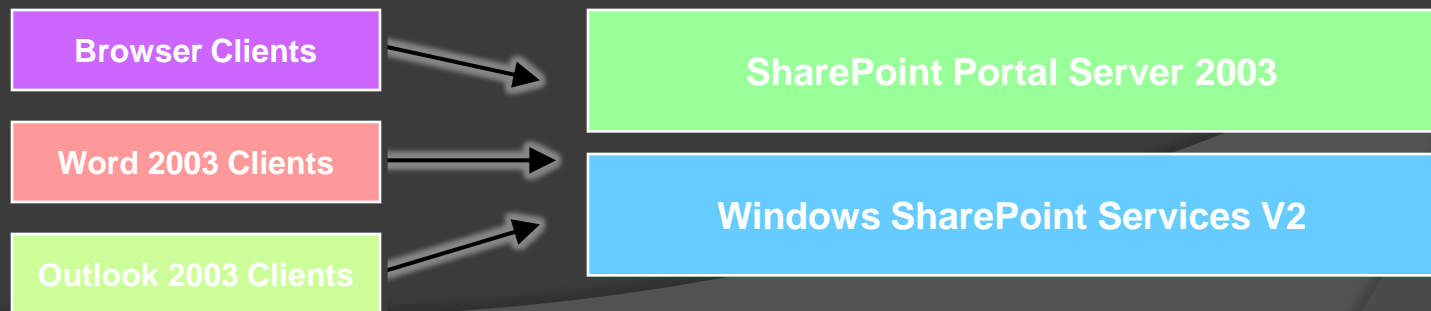
Smart Documents

VSTO

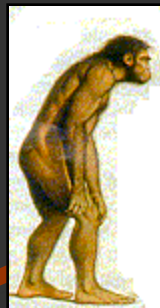


Office 2003 Server Components

- ◎ Windows SharePoint Services (WSS v2)
 - Site and Workspace Provisioning Engine
 - Accessibility from browser and Office client applications
 - Out-of-the-box Collaboration Services
- ◎ MS Office SharePoint Portal Server 2003 (SPS)
 - Aggregation and search features
 - Social networking (Profiles, Audiences, My Sites)



Evolution of the Web/WSS Developer



HTML

CSS

JavaScript

ASP

COM Components

.NET Framework

ASP.NET 1.x

ASP.NET Pages

.ASMX Web Services

WSS Web Parts

WSS Event Handlers

WSS Site Definitions

ASP.NET 2.0

SharePoint 2007: Capabilities to Meet Diverse Needs

Work Easily with Others

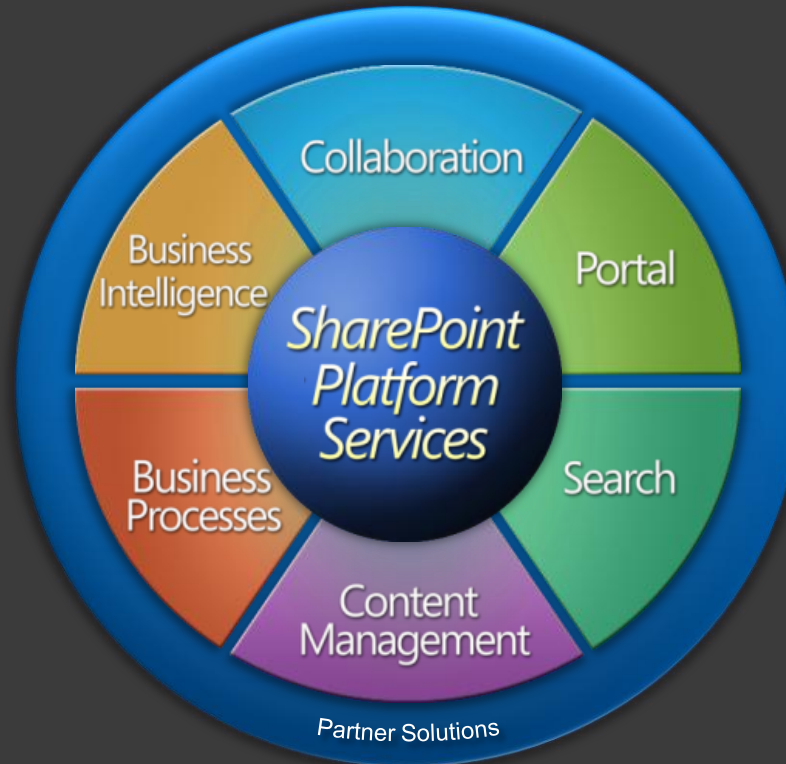
Docs/tasks/calendars, blogs, wikis,
e-mail integration, project management
“lite”, Outlook integration, offline
docs/lists

Develop business insight

Server-based Excel
spreadsheets and data
visualization, Report Center, BI
Web Parts, KPIs/Dashboards

Capture business data and automate processes

Rich and Web forms based
front-ends, LOB actions,
pluggable SSO



In-context, role-based access

Site Design, Web Content
Management, Application
Development, Personalization

Connecting people and information

Enterprise scalability, contextual
relevance, rich people and
business data search

Manage the content lifecycle

Integrated document management,
records management, and Web
content management with policies
and workflow

What Do "SharePoint Developers" Build?

The SharePoint2007 Developer
a modern, evolving life form



Enterprise Developer

- Designing Portals
- Extending the Search Engine
- Integrating with LOB systems
- Creating Public Web Sites
- Creating Business Forms
- Creating Custom Workflows
- Managing Enterprise Content
- Creating Custom Policies
- Creating Scorecard, BI Reports

Office Client Developer

- Creating Word Template Solutions
- Extending the Ribbon
- Developing Office Add-ins
- Developing VSTO solutions
- Creating Business Forms
- Programmatically Manipulating XML Documents

Web/WSS Developer

- Creating Features and Site Definitions
- Developing Custom Application Page
- Developing Page Templates and Web Parts
- Designing Custom List Types
- Developing Event Handlers
- Developing Custom Workflows
- Creating Solution Packages for Deployment

Customization Versus Development

⦿ Site Customizations

- Changes to one particular site
- Done using the browser or the SharePoint Designer
- Changes recorded in content database
- Easy to do but hard to reuse

⦿ WSS/MOSS Development

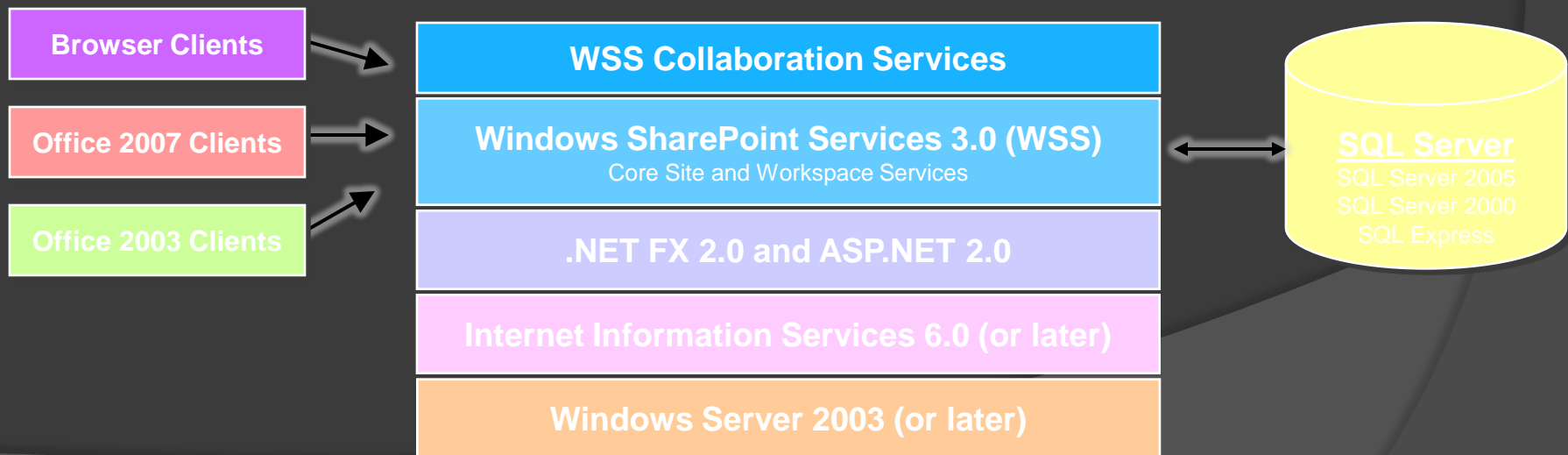
- Creation of reusable templates/components
- Templates/components installed on Web server
- Development based on Visual Studio projects
- Project source files checked into source code control
- Projects can be moved through staging to production

What is a Feature?

- ⦿ A building block for creating SharePoint solutions
 - A unit of design, implementation and deployment
- ⦿ Features can contain elements
 - e.g. menu items, links, list types and list instances
 - Many other element types possible
- ⦿ Features can contain event handlers
 - You can add any code which used WSS object model

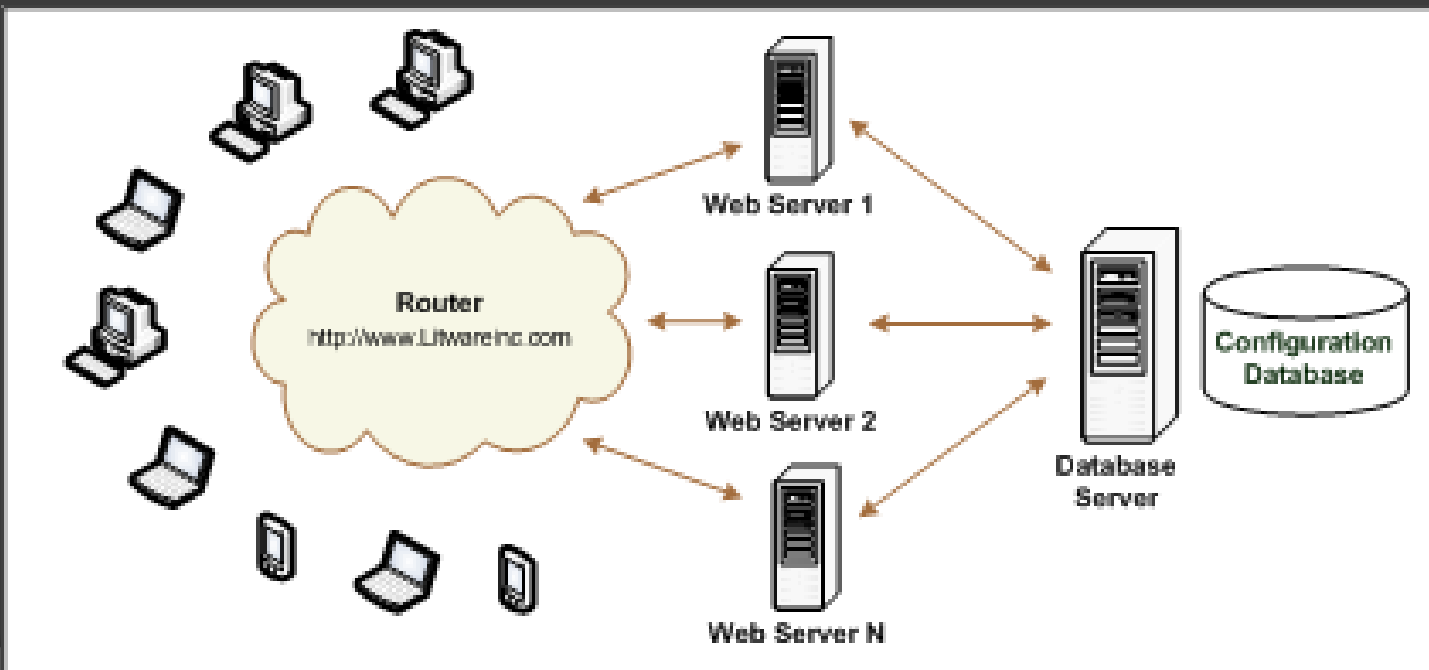
The WSS 3.0 Server-side Platform

- An engine for creating/running/managing sites
- Architecture designed to scale to 10,000s of sites
- Platform for building Web application and solutions
- Collaboration services included out-of-the-box



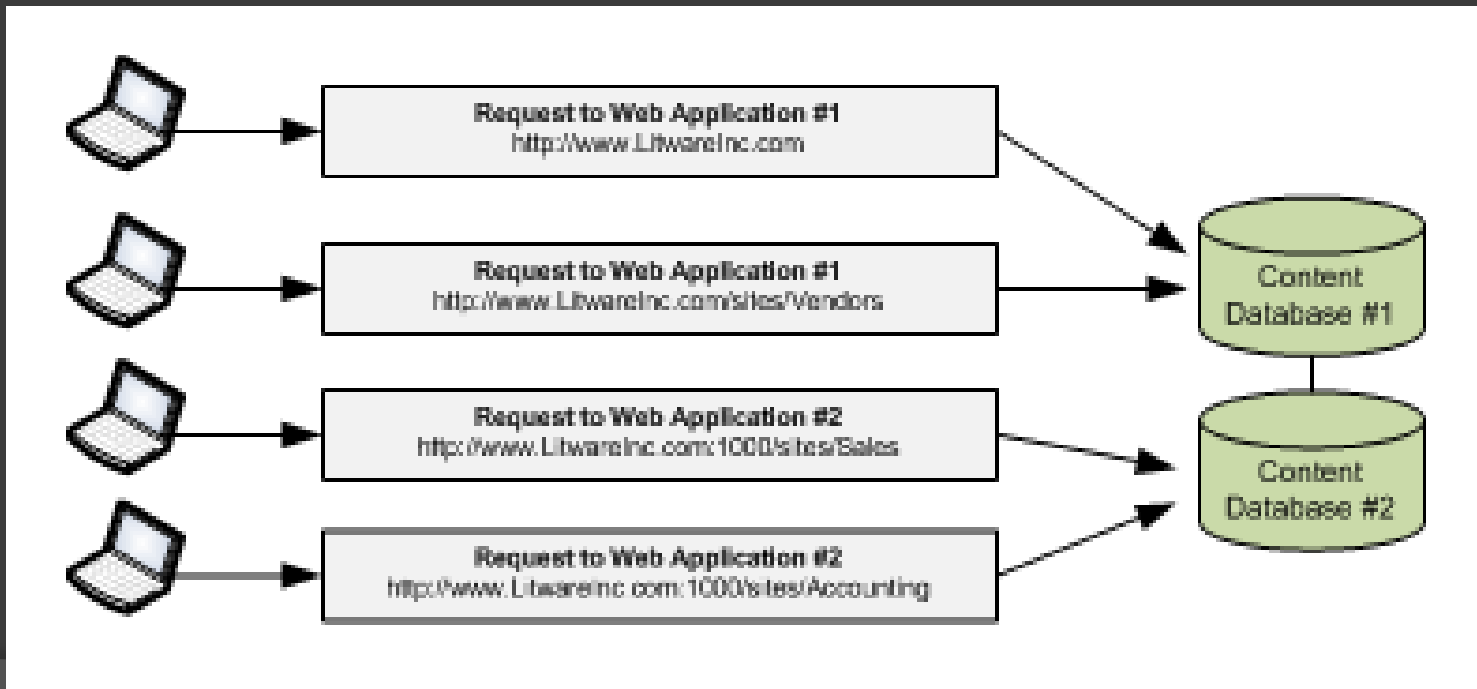
The WSS Farm

- WSS deployment based on a farm
 - Farm requires Web server(s) and database server
 - Farm can be single server or multi-server
 - Each farm has exactly one configuration database



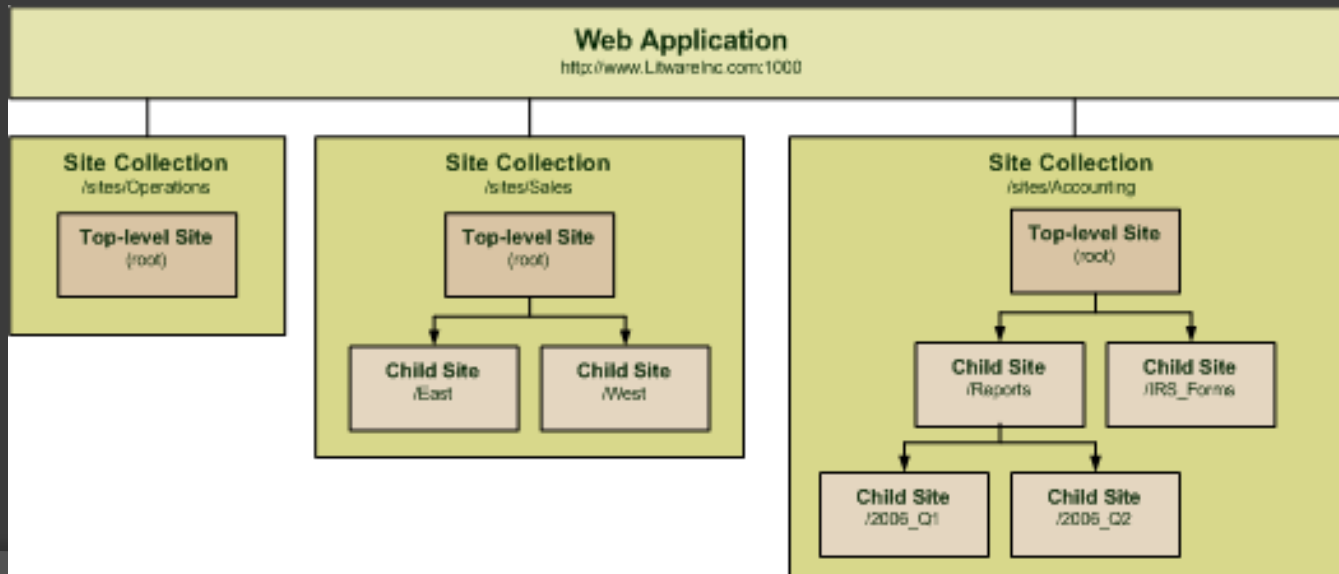
Web Applications

- ◉ Web Applications provide HTTP entry points
 - Web Applications based on IIS Web sites
 - Web Application defines one or more URL spaces
 - Web Application security configured independently



Site Collections and Sites

- Sites are partitioned using Site Collections
 - Site collection is scope for administrative privileges
 - Site collection always contains top-level site
 - Site collection may contain hierarchy of child sites
 - Web application can support 1000s of site collections

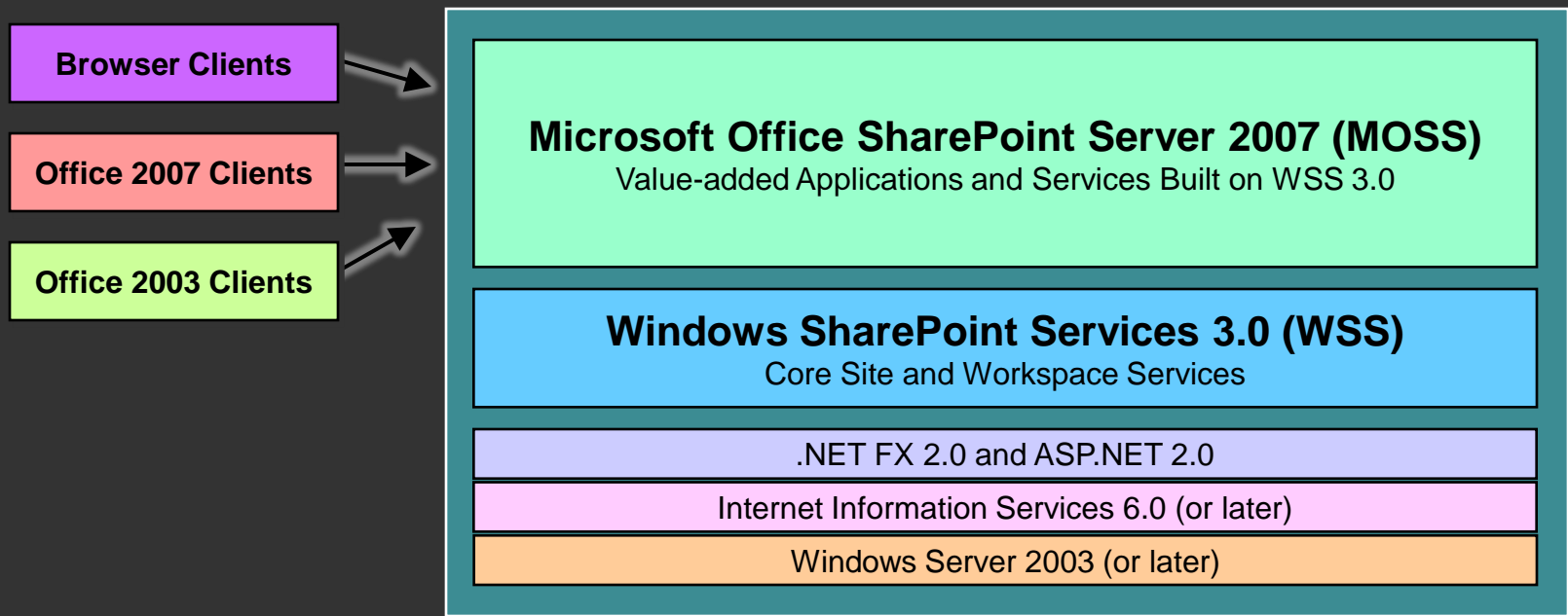


DEMO

- STSADM
- Central Admin
- Create Site Collection
- Site Settings
- Create Page
- List Settings
- Web Part Page
- SharePoint Designer

Microsoft Office SharePoint Server 2007

- Microsoft Office SharePoint Server 2007 (MOSS)
 - Components and services built on WSS 3.0

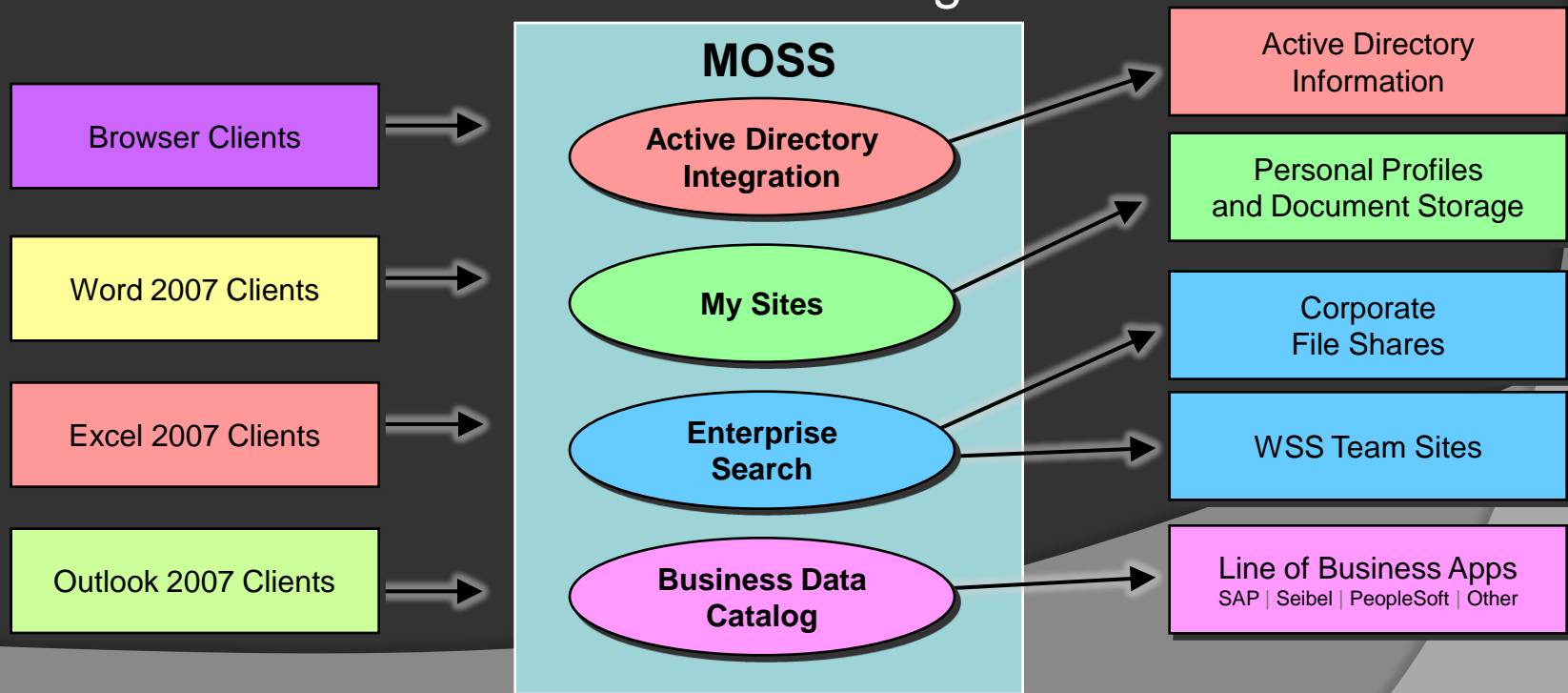


MOSS Services and Components

- ◎ What does MOSS Standard Edition provide?
 - Next-generation features of SPS 2003 (Portal)
 - Next-generation features of CMS 2002 (WCM)
- ◎ What does MOSS Enterprise Edition provide?
 - Forms Services
 - Business Data Catalog
 - Excel Services

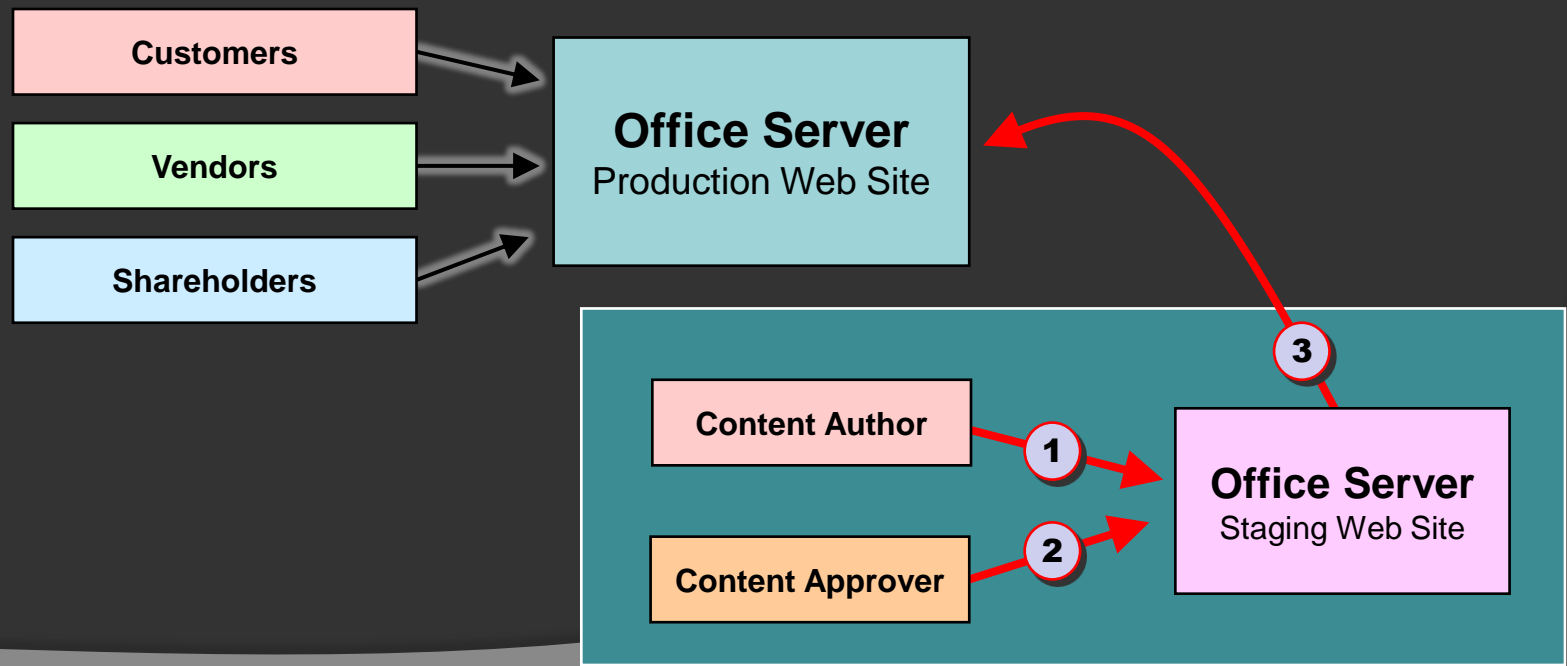
Portal and Search

- MOSS includes next-generation of SPS features
 - User profiles, audience targeting and MySites
 - Enterprise search
 - Introduces Business Data Catalog



Web Content Management

- ◉ WCM features designed for public Web sites
 - Core CMS features integrated into MOSS
 - Features for site branding and customized page layouts
 - Profession publishing features for content approval



InfoPath 2007 and Forms Services

◎ InfoPath 2003

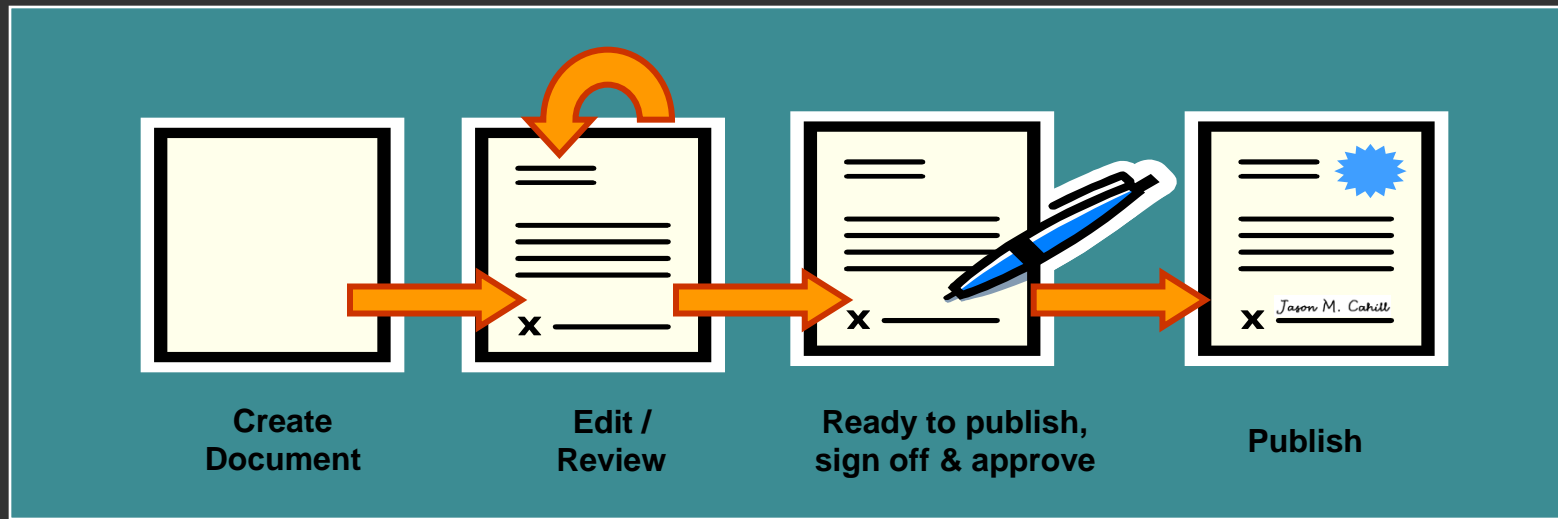
- Capture business data with dynamic, XML-based forms
- Rich data entry and validation
- Integration with back-end LOB systems

◎ InfoPath 2007 and Forms Services

- Ability to push InfoPath forms to browser-based clients
- Integration with Office 2007 client applications

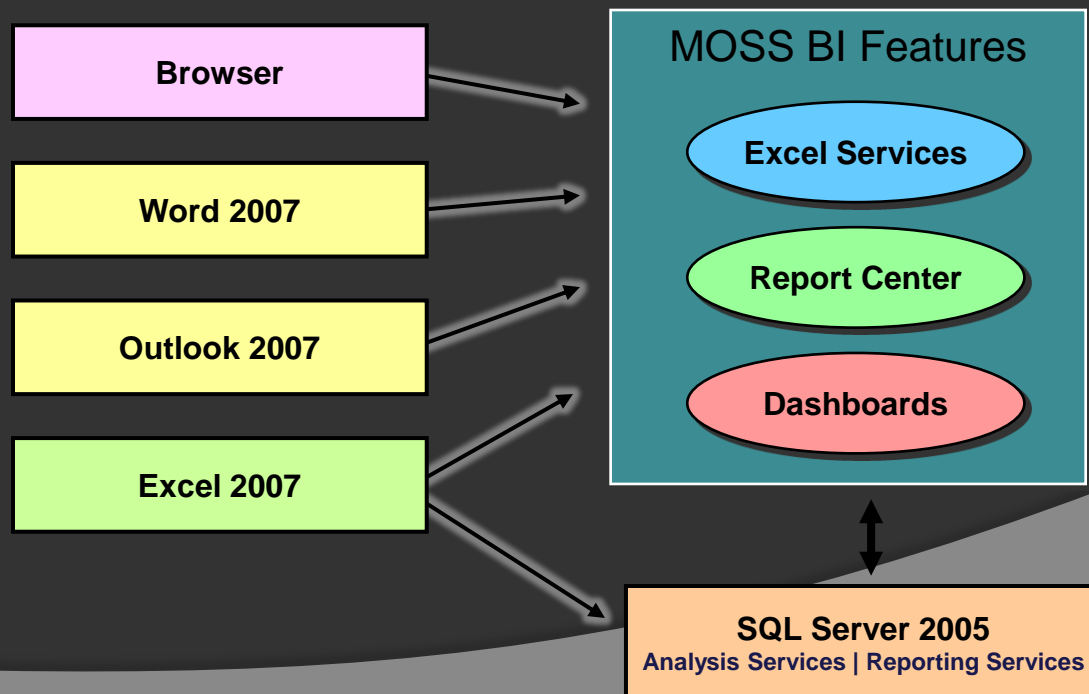
SharePoint 2007 Workflows

- ◎ WSS and MOSS provide rich workflow support
 - Support built on Windows Workflow Foundation (WF)
 - WSS provides development platform for workflows
 - MOSS provides several valuable workflows out-of-box



Business Intelligence

- ◎ The MOSS Vision for Business Intelligence (BI)
 - Provide business insight to all employees
 - Lead to better, faster, more relevant decisions
 - Integrate with BI features of SQL Server and Excel



Development Tools

- VPC
- Visual Studio 2005/2008
- Source Control
- STSADM
- SharePoint Designer
- SharePoint SDK (BDC Def Editor)
- Notepad 😊

Visual Studio Add-Ins

- VSeWSS
- CodePlex (Community Kit, etc.)
- STSDEV
- SharePoint Project Utility Tool – Andrew Connell

Tips

- ⦿ VPC w/ WSPs
- ⦿ SharePoint Designer
 - Master Page
 - Data Export
- ⦿ SharePoint web services
- ⦿ DataForm web part
- ⦿ Don't forget ASP.NET user/server controls