

Using Microsoft SharePoint to Develop Advanced Forms and Workflow Automation

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About Quilogy

About Quilogy

- Headquartered in St. Charles, MO
- 15 years in business
- Microsoft National Systems Integrator
- Microsoft Project Consulting
- Microsoft Project Staffing
- National presence and scale

Microsoft Leadership

Gold-Certified Partner – Seven Competencies

- Advanced Infrastructure
- Business Process & Integration
- Custom Development
- Data Management
- Information Worker
- Learning Solutions
- Microsoft Business Solutions



Solutions & Services

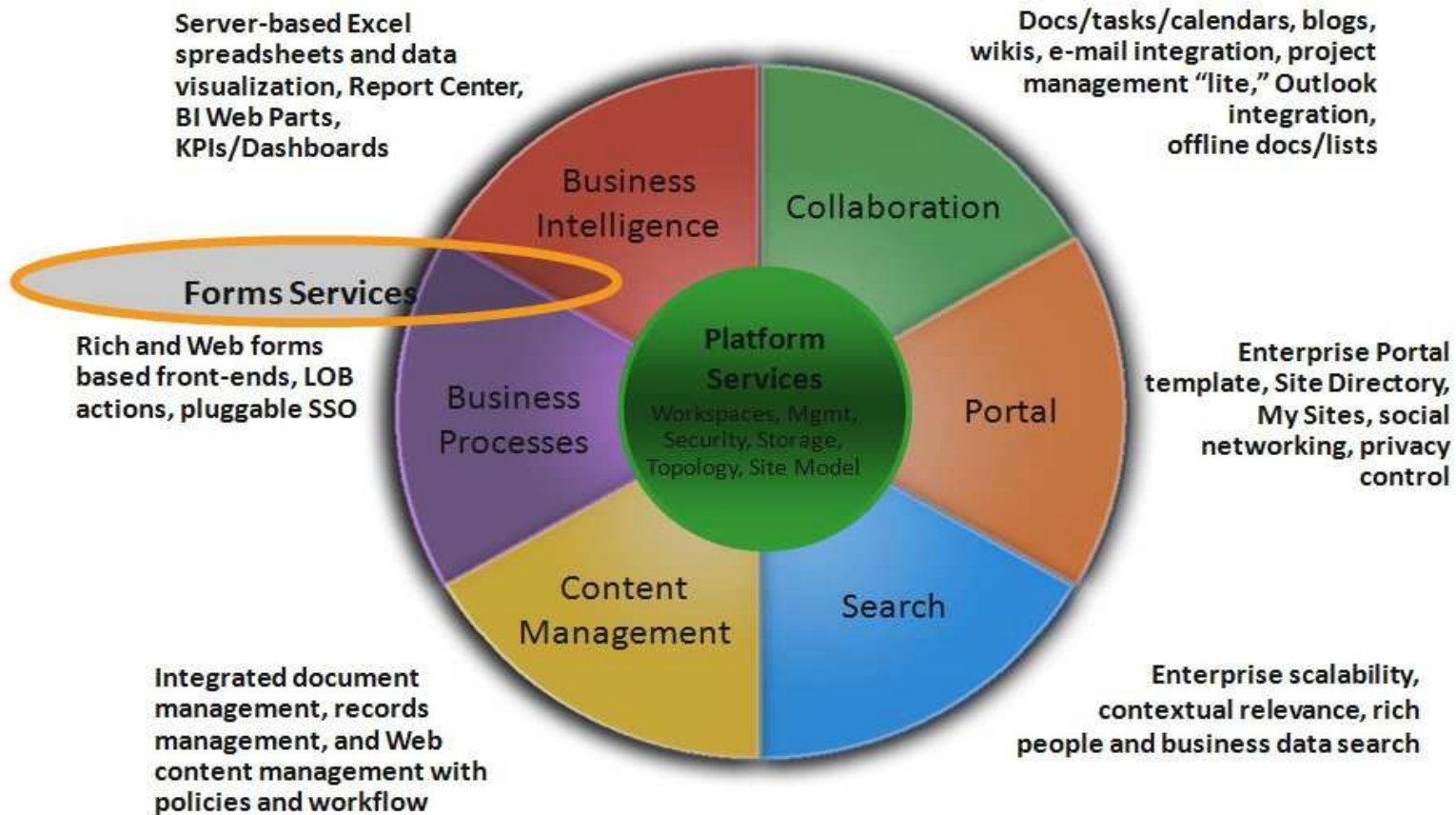
- Application Development & Infrastructure
 - Business Intelligence & Integration
 - Microsoft Dynamics CRM and ERP
 - Web design and Learning solutions
 - Portals and Office 2007 Solutions
-
- Managed Hosting
 - Technical Training

Value Delivered

- National Practice Expertise
 - Deep expertise across all geographies
 - Ability to scale beyond local resources
- Local Presence
 - Deep local relationship with clients
 - Local marketing events
- Industry Leadership
 - Healthcare
 - Public Sector
 - Manufacturing
 - Services



Office InfoPath 2007 Solutions



Enabling Technologies

- Microsoft Office SharePoint Server 2007 (MOSS)
- MOSS Client Access Licenses
 - Standard CAL
 - Enterprise CAL
- Microsoft Office
 - Microsoft Office Pro Plus 2007
 - Microsoft Office Enterprise 2007
 - InfoPath 2007
- SharePoint Designer
- Visual Studio



Today's Business Process Challenges

- **Forms**
 - Time-Consuming/Painful to Complete
 - Cannot Validate Data Before Submission > Rework
 - Storage/Imaging Costs
- **Workflow**
 - Lack of Visibility Into Process
 - Manual Hand-Offs and Status Tracking
 - Delays/Expanded Cycle Times
- **Data Capture**
 - Duplicate Data Entry
 - Data Entry Errors



InfoPath Features

- Simple to design
- Able to develop a complex form
- Different Views depending on user
- XML
- Integration with database
- Easy integration with SharePoint



Reach More Users

...With Browser-Based InfoPath Forms

Internet Explorer

Firefox

Contoso Financial
LOAN APPLICATION

This application is designed to be completed by the applicant(s) with the Lender's assistance. Applicants should complete this form as "Borrower" or "Co-Borrower", as applicable. Co-Borrower information must also be provided (and appropriate box checked) when the income or assets of a person other than the "Borrower" (including the Borrower's spouse) will be used as a basis for loan qualification or the income of the Borrower's spouse will not be used as a basis for loan qualification, but his or her liabilities must be considered because the Borrower resides in a community property state, the security property is located in a community property state as a basis for repayment of loan.

TYPE AND TERMS OF LOAN

Mortgage: VA Conventional Refinance Loan Amount: \$50,000
 Applied for: FHA none
 Agency Case Number: Lender Case Number:

APPLICANT INFORMATION

Name: Ray Smith
 Date of birth: 3/14/1970 SSN: 555-44-9999 Phone: (206) 415-2838
 Current address: Seattle, WA ZIP Code: 98002
 City: State: ZIP Code: 98002
 Own Rent (PI select one) Monthly payment or rent: \$1,800.00 Since: 5/28/2002

EMPLOYMENT INFORMATION

Current employer: Adventure Works Since: 12/1/2000
 E-mail: Ray.Smith@AdventureWorks.com Position: Store Manager
 Hourly Salary (PI select one) Annual income: \$60,000.00

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Tested for:

- Internet Explorer
- Firefox
- Safari
- Netscape
- HTML-enabled mobile devices

On:

- Microsoft Windows
- Macintosh
- Linux
- Unix



Streamline Business Processes

...By Submitting Forms and Data To...

SharePoint Libraries

Type	Applicant Name	Approved Phone No.	Employer Name	Annual Income	Loan Amount	Interest Rate	Status
Individual	John Smith	(303) 555-1234	ABC Corp	78000.00	20000.00	0.055	200
Business	Jay Nelson	(415) 888-9000	XYZ Inc	95000.00	25000.00	0.058	300
Individual	Jane Doe	(202) 444-5555	DEF LLC	120000.00	30000.00	0.052	150
Business	John Smith	(415) 333-4444	GHI Inc	85000.00	18000.00	0.057	250
Business	Paula Lee	(303) 222-3333	JKL Research	110000.00	22000.00	0.055	350
Business	Henry Kim	(502) 666-7777	QRS Systems	90000.00	16000.00	0.053	180
Business	Michelle Green	(303) 111-2222	STU Partners	105000.00	21000.00	0.054	280

Web Services



Microsoft
SQL Server

ORACLE

Microsoft
BizTalk

SIEBEL

SAP



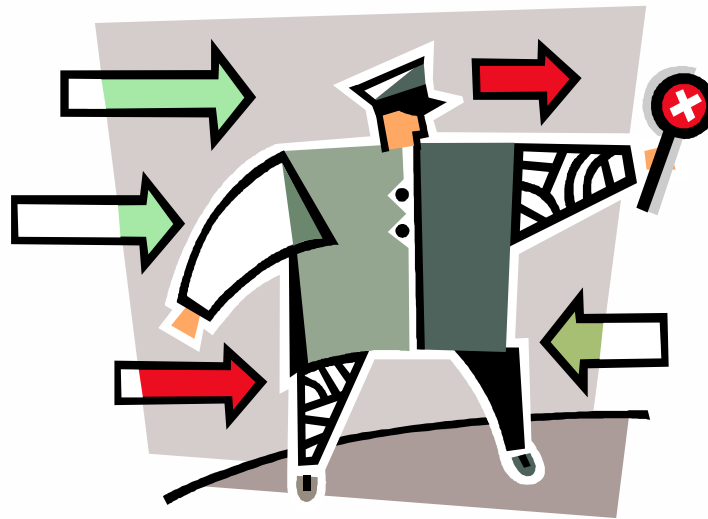
Previous Workflows

- Business Processes
 - Occur sequentially over time
 - Often dependent on other processes
- Problem – running asynchronously with the web service without tying up the CPU or losing.
 - Solution: SharePoint



SharePoint Workflow

- Becomes the Traffic Cop



- Coordinating multiple steps
- Telling each process when to run and stop



Workflow Design Options

- SharePoint Out of box templates
 - Serial and Parallel
 - Individuals or Groups
- Create custom workflows in SharePoint Designer without code
- Visual Studio add-in for highly complex workflows



Electronic Forms

- **Benefits**

- Reach more customers, partners, and suppliers
- Reduce time completing forms
- Data validation at time of entry
- Data connectivity to line-of-business applications
- Eliminates paper production and storage

- **Results**

- Saves time
- Saves money
- Improves data accuracy and completeness



Workflow

- **Benefits**

- Decreases workflow cycle times
 - Automate return/rejection processes
 - Automate delegation capabilities
- Reduces time tracking status of requests
 - Workflow statuses available to all involved in the process

- **Results**

- Saves time
- Saves money



Putting it all together...

- InfoPath – a strong and flexible tool
- WorkFlow – Traffic cop coordinating processes
- SharePoint – provides the “plumbing” to integrate it all together



Example: InfoPath + SharePoint library = Instant Scorecard

Welcome Judy Nichols | My Links |

This List: HLC Engagement Sta

Site Actions

View: **This Week**

Engagement Type	Scope Status	Schedule Status	Risk Status	Review Status	Budget Status	Issues Status	Resource Status
Fixed Price	Needs Attention	OK	OK	OK	OK	OK	OK
Time and Materials	OK	Needs Attention	OK	OK	Needs Attention	OK	OK
Time and Materials	OK	Needs Attention	OK	OK	Needs Attention	OK	OK
Time and Materials	OK	OK	OK	OK	OK	OK	OK
Time and Materials	OK	OK	OK	OK	OK	OK	OK
Fixed Price	OK	OK	OK	OK	OK	OK	OK
Fixed Price	OK	OK	OK	OK	Needs Attention	OK	OK
Time and Materials	OK	OK	OK	OK	OK	OK	OK
Fixed Price	OK	OK	OK	OK	OK	OK	OK
Fixed Price	OK	OK	OK	OK	OK	OK	OK
Time and Materials	OK	OK	OK	OK	OK	OK	OK
Fixed Price	OK	OK	OK	OK	OK	OK	OK
Fixed Price	OK	OK	OK	OK	OK	OK	OK
Fixed Price	OK	Needs Attention	Needs Attention	OK	Needs Attention	OK	OK
Time and Materials	OK	OK	OK	OK	OK	OK	OK



Example: InfoPath + VS Workflow = Automated Vacation Request Process

HLC Vacation Requests

Date Of Request: 10/21/2008 **Employee Name:** Judy Nichols **Location @ Vacation:** Greece

Please note - it is the employee's responsibility to verify that they have enough vacation/holiday benefit time available for the time submitted. Approval of a request does not guarantee vacation benefits are available.

I would like to request vacation for the following time period:

Start Date	End Date	Plan for Coverage
12/28/2008	1/3/2009	Designated team member for each project to take over

Insert Additional Date Range

The following projects will be affected by my absence:

Engagement Number	Engagement Mgr
12345	Judy Nichols
67890	Chris Carper

I have added this to my timesheet so it shows in RAFT

My Out of Office Email message will be direct responses to:
Mike Jenkins

In case of an emergency, I can be contacted via:
Cell Phone

Approved Yes No **Approved Date:** **Approved by:**

1. User submits request
2. Manager approves
3. Project managers affected are notified
4. Vacation calendar is updated



InfoPath .xsn Design

– If you have a change that requires modifying a data connection or effects multiple controls...

*The BEST solution is to use the code for modifying.

- Step 1: Make a copy of (Form).xsn.
- Step 2: Rename the .xsn to .cab.
- Step 3: Use the manifest.xsf for the code behind the (Form).xsn.
 - All files that are included in the package .xsn will be located in the .cab for modifying.



Resources

- WSPBuilder – A freeware SharePoint Solution Package (WSP) creation tool for WSS 3.0 & MOSS 2007

<http://www.codeplex.com/wspbuilder>

- Nintex – A browser based solution for building complex workflows.

<http://www.nintex.com/en-US/Products/Pages/Workflow2007.aspx>

