

FORMS & WORKFLOW SHAREPOINT 2010

Practical Discussion



Agenda

- ▣ Introduction
- ▣ Workflow
 - Business Problems
 - General Scenarios / Approaches
 - What Is It?
 - Specifics, Pitfalls, and Recommendations
- ▣ Forms
 - Business Problems
 - General Scenarios / Approaches
 - What Is It?
 - Specifics, Pitfalls, and Recommendations

Overview

SharePoint has the capability to provide functionality in hundreds of different capacities.

Forms and Workflow are just tools to solve a problem

What's my business problem?:

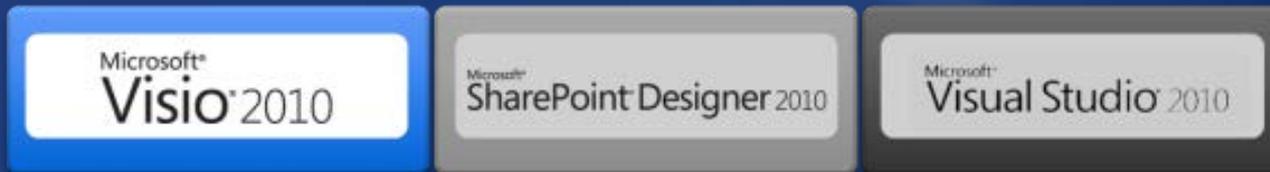
What are my pain points where SharePoint can fit in?

How can we improve and manage the process and in our organization?

What are the tools for the job?

SharePoint Workflow

Visio, Designer, and Visual Studio



Business Problems

What's a Workflow Project?

- *There isn't one 😊*
- *Sometimes it's obvious, sometimes it's not*
- *Don't ask, if it's a workflow project ask if I should utilize the workflow tools?*
- *What is the business process?*
 - *Repeatable*
 - *Definable*

Business Problem – Ad Hoc Tracking Scenario

Fluid Process, Assignment and/or Status Based

- Utilize “Task” as a list template to leverage the built in email ability for assignment.
- Workflow “process” simply managed by users assigning and re-assigning to next person
- Enable versioning to keep track of changes and assignments
- Use a manual “status” or state column (e.g. Complete, In Review)

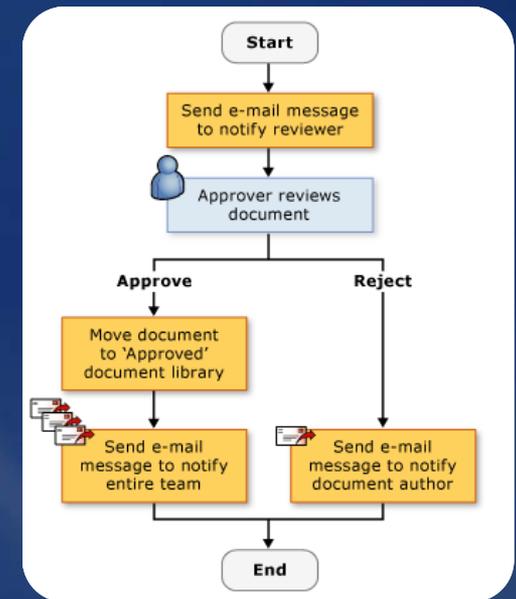


Business Problem – Structured Process

Defined Process

e.g. Reviewed by Staff, Assigned to Auditor, Approved by Manager

- Use SP Workflow to manage process, assignments and approvals
- Hardest part is getting the business users to define/explain the process completely
- Use Visio to map out process at business level



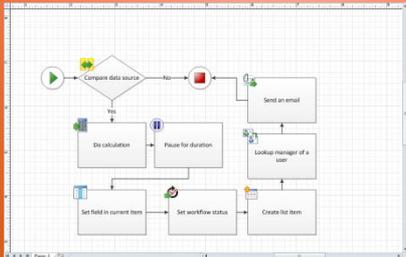
SharePoint Workflow Tools

Microsoft®
Visio® 2010

Business Analyst/Process
Designer

Design skeleton
workflow processes

View workflow
visualizations



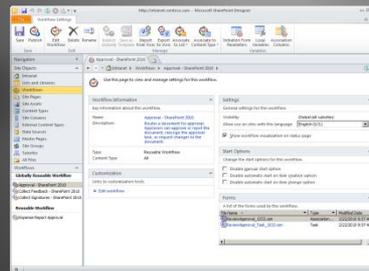
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Microsoft®
SharePoint Designer 2010

Designer/IW/Power User

Declarative
Workflows



.wsp

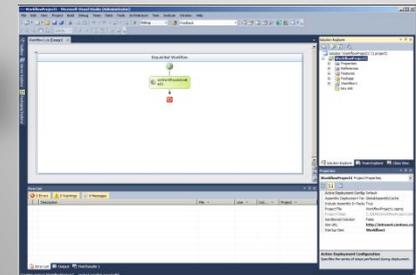
Microsoft®
Visual Studio® 2010

Professional developer

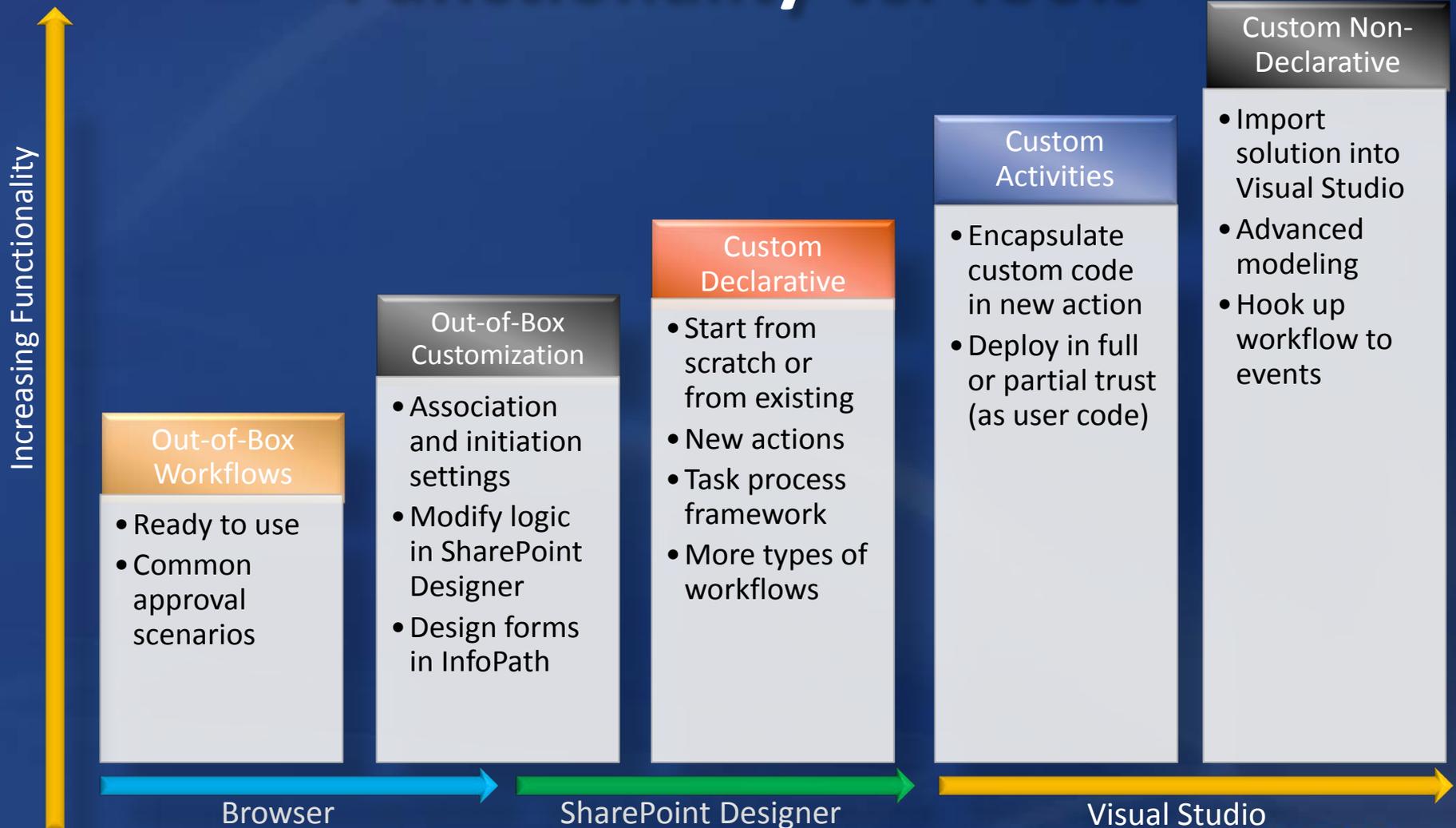
Code Workflows

Event Receivers

Custom Activities



Functionality vs. Tools



Workflow Management in SP 2010

▣ Advantages

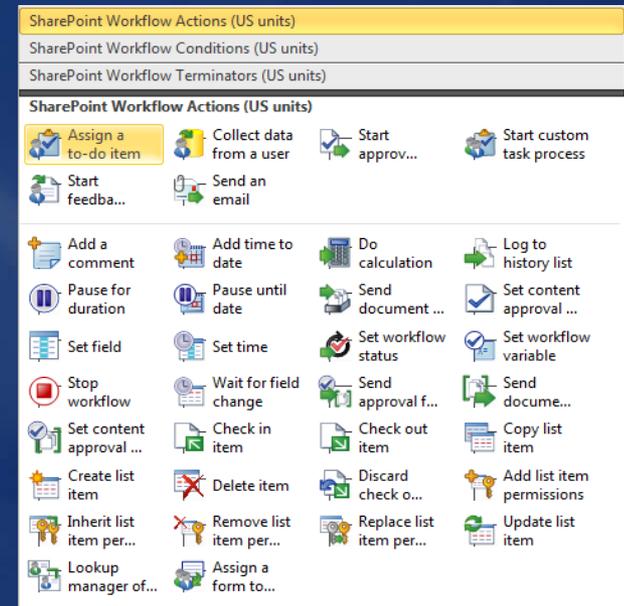
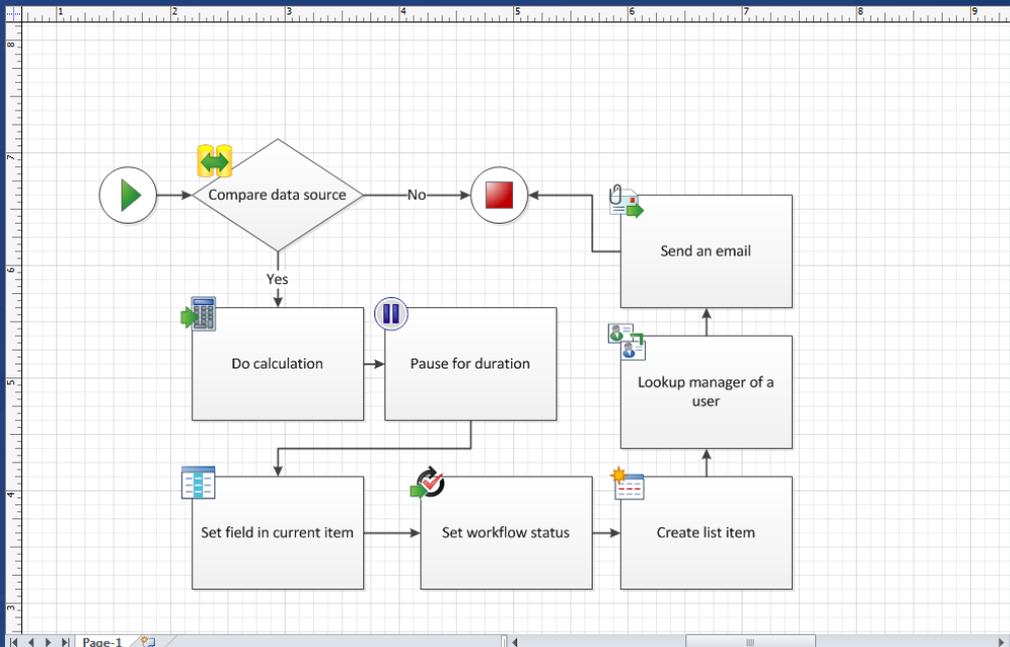
- Easy to create, modify and publish sequential workflows
- New features for visual authoring and tracking and new steps and functional improvements
- Flexible and extensible platform built on WWF
- Form customization is pretty easy

▣ Disadvantages

- Lack of interoperability between standard tools
- SharePoint Designer workflows can be only sequential and UI is not user-friendly
- Need strong technical knowledge to create complex workflows

Creating Workflows in Visio 2010

- Visio has SharePoint Workflow template
 - Allows you to create workflow design in Visio
 - Workflow can be exported to SharePoint Designer



Creating Workflows in Visio 2010

▣ Pro's

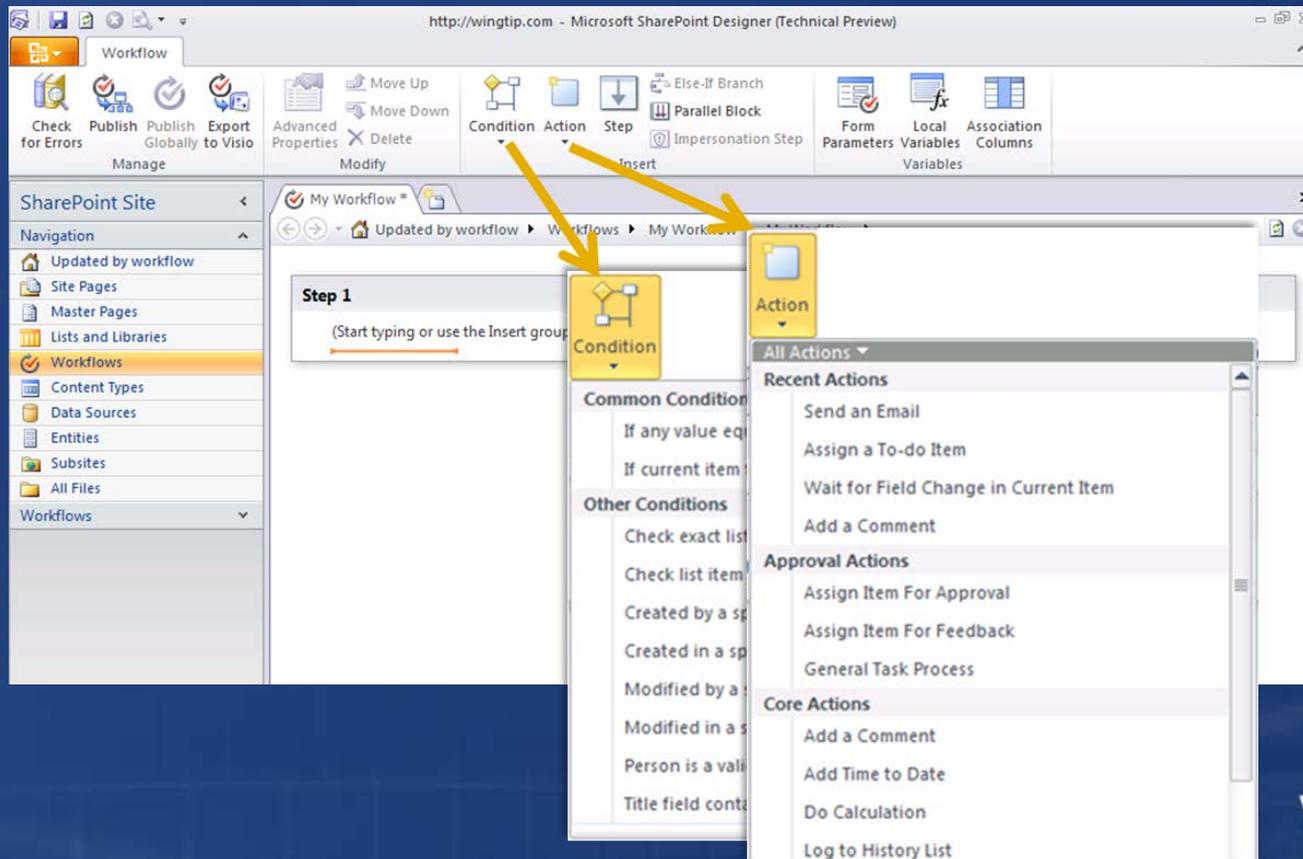
- Can “Round-trip” between SP and Visio
- Allows you to visually see the process

▣ Con's

- Steps are very granular, so in reality not necessarily that great for business users
- Not directly connected to SP list, so you must complete the workflow once you import!

SharePoint Designer Workflows

- ▣ New “Full Screen” declarative workflow designer



Types of Workflows

▣ List Workflow

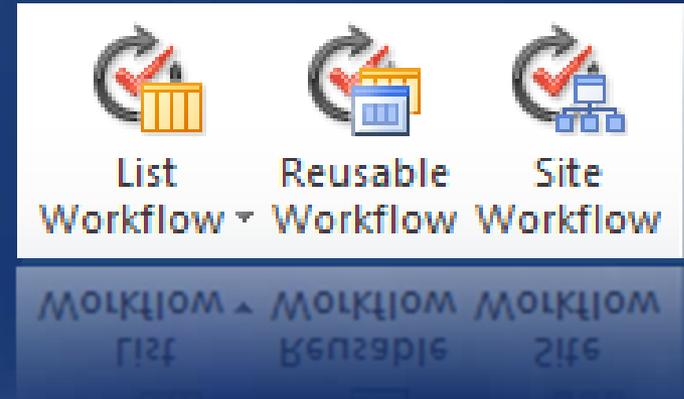
- Associated with a list
- Much like MOSS 2007 Workflows
- Can be created in SPD 2010
- Can be imported/exported from Visio

▣ Reusable Workflow

- Can be assigned to content type
- Can be exported to **.wsp** for use in other sites
- Can be imported/exported from Visio
- Can be created in SPD 2010 & VS2010

▣ Site Workflow

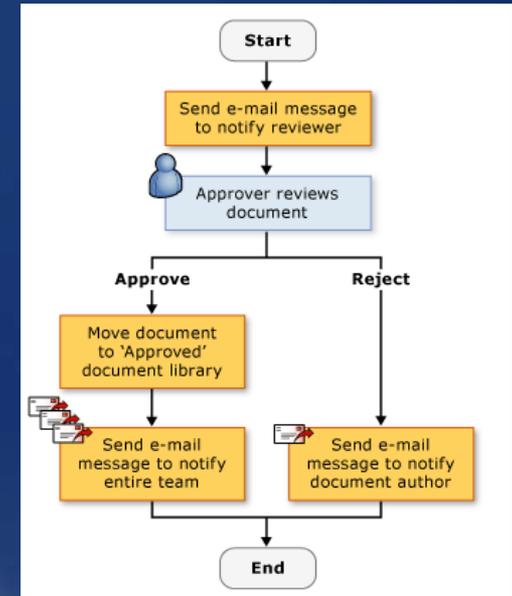
- Not bound by a list
- Manually Started or via OM
- Can be created in SPD 2010 & VS2010



Types of Workflows

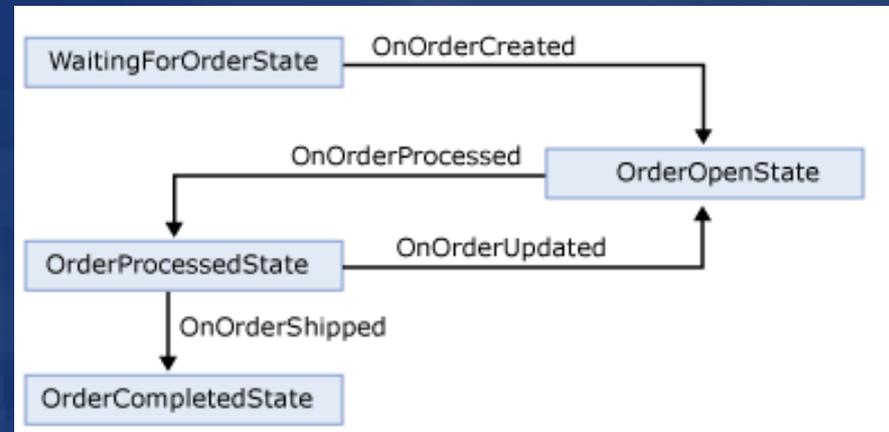
□ Sequential Workflows

- Step by Step workflows
- Always moving forward can not going back in time
- Out of the box workflows are sequential
 - Approval
 - Collect Feedback
 - Collect Signatures
 - Three State



□ State Machine Workflows

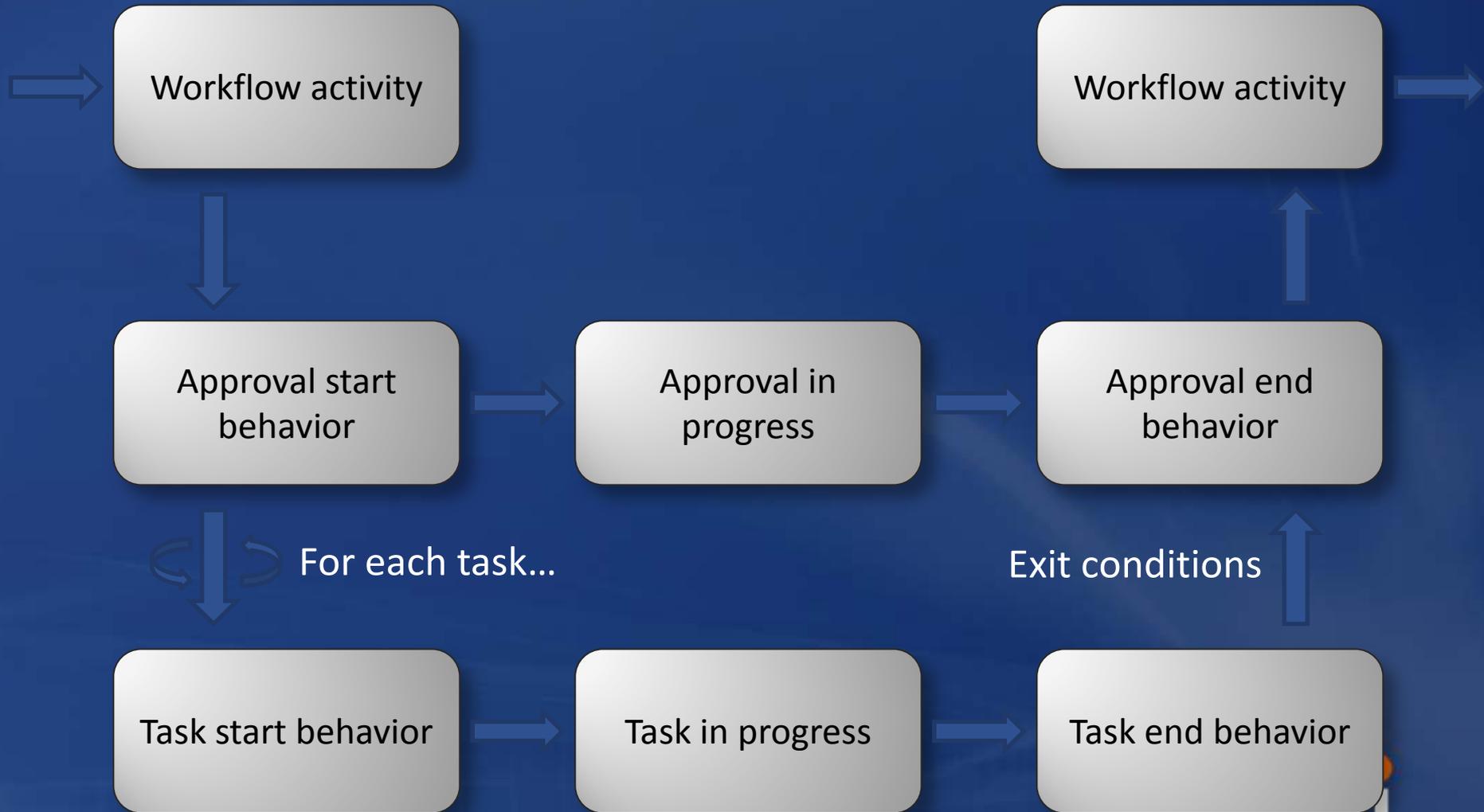
- Can go back in time
- Must use Visual Studio 2010



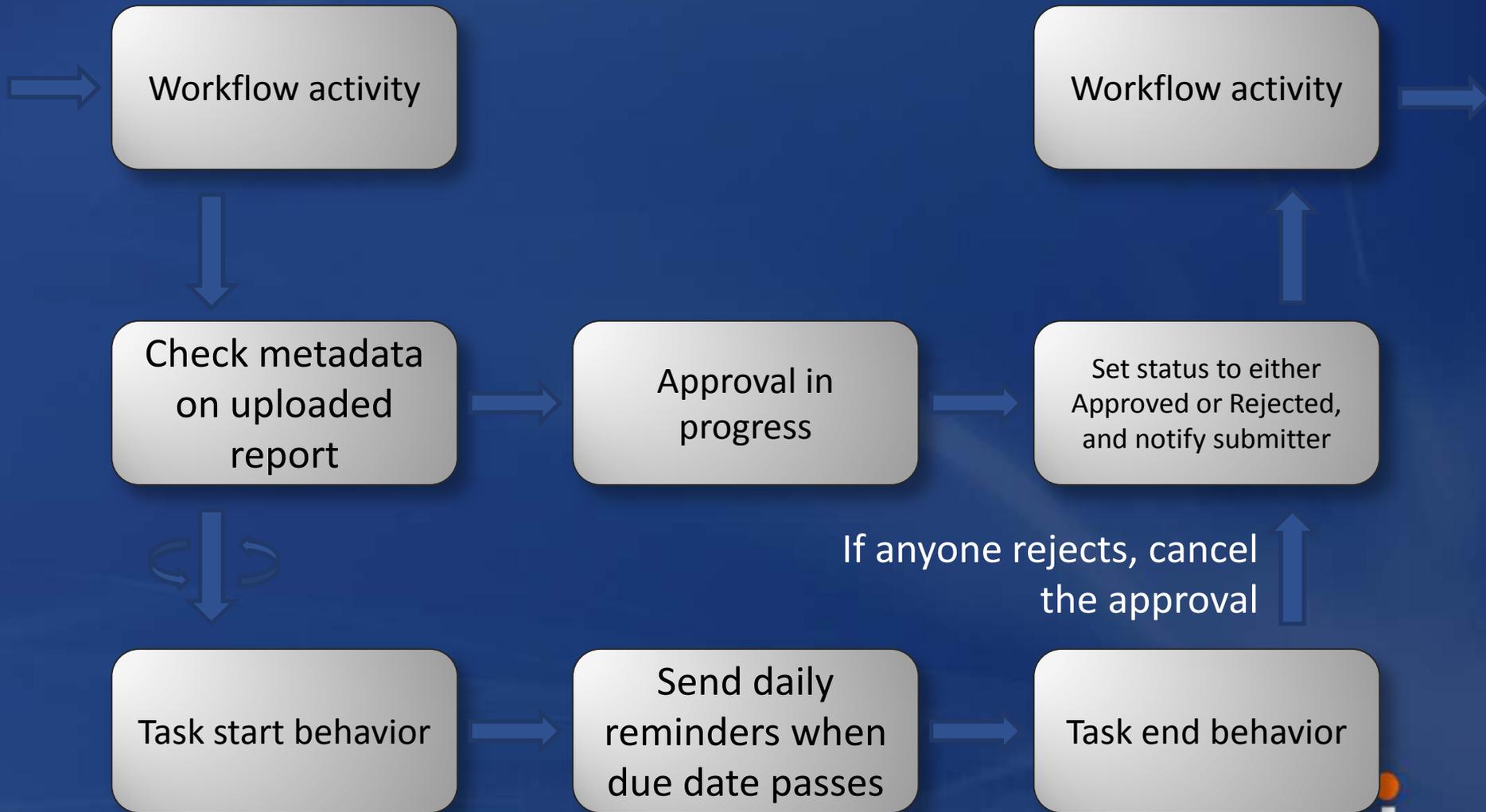
SharePoint Designer OOTB Actions

- ▣ Core Actions
 - Send Email, Set WF Status...
- ▣ Document Set Actions
 - Send to Repository, Start Approval...
- ▣ List Actions
 - Check In/Out Item, Declare Record...
- ▣ Relational Actions
 - Lookup Manager of User
- ▣ Utility Actions
 - Substring operations, Interval between dates
- ▣ Task Actions
 - Start Approval, Assign a To-Do...

How It Works: The “OfficeTask”



Example: Expense Reporting



Task Process Designer

The screenshot shows the 'Approve Expense Report' task process configuration page. It includes sections for Task Information, Customization, Settings, Task Form Fields, and Task Outcomes.

Task Information

Key information about this task process.

Name: Approve Expense Report
Owner: <click to edit>

Customization

Links to task customization tools.

- Return to the workflow
- Change the completion conditions for this task process
- Change the behavior of a single task
- Change the behavior of the overall task process

Settings

General settings for this task.

General Settings

- Only allow task recipients and process owners to read and edit workflow tasks

Show the following commands on the task form:

- Reassignment
- Change Requests

Task Form Fields

Fields displayed on the task completion form.

Column Name	Type	Property
There are no items to show in this view.		

Task Outcomes

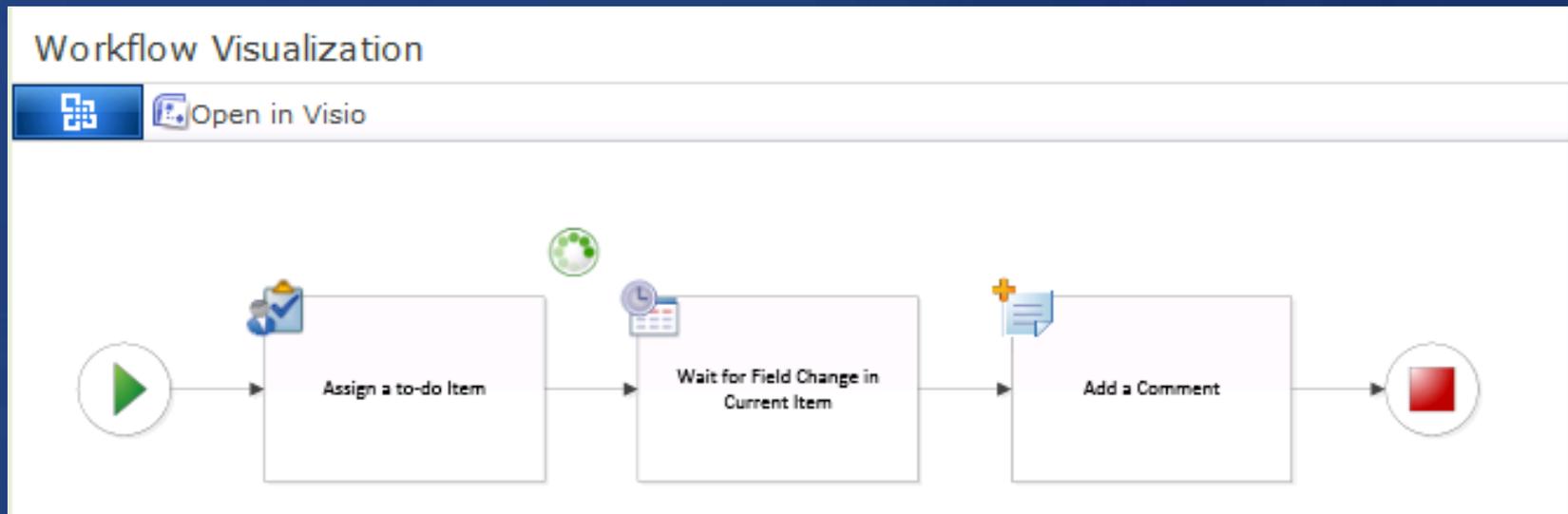
Outcomes define the set of buttons shown on the task completion form.

Sequence	Name	Task Form Button
1	Approved	Approve
2	Rejected	Reject

- View all task information
- Customize the whole process, or individual tasks (or both)
- Build robust behaviors
 - “If 50% agree, auto-approve”
 - “If user is unavailable, escalate to manager”
 - “If this task wasn’t meant for me, let me reassign it to another user”

Visio Visualization

- ▣ Visualize a single workflow instance
 - Not for aggregation, reporting or auditing
 - Only for SharePoint Designer



Designer Workflows : Tips

- ▣ Try to work through the whole process
 - Don't "jump into code" in designer
 - Map each part of the process to a corresponding workflow activity
 - Define any dash boarding, reporting or notification requirements before workflows are designed.
 - ▣ Since many of these require reporting or information of "in-process" state of workflows they often need to be part of the workflow itself, or have information provided by the workflow
- ▣ Know the Actions well! What's Easy and What's Hard

Designer Workflows : Gotchas

- ▣ Who do I work for again?
 - Manager – Organizational hierarchy
 - Active Directory usually not even close
 - Requires a Custom User Profile Import
- ▣ Standard Designer Workflows Encourage lots of “Tasks”
 - 2 or more places to go – confusing user experience
 - Use Status or other tracking items in primary list to assist in providing status

Designer Workflows : Gotchas

- ▣ What Happens When I Can't Do What I Want?
 - *This is why you want to scope out the process !*
 - Custom Actions
 - ▣ Code based “add-ins” for Designer
 - ▣ Must be deployed to individual computers
 - Re-Write Workflow in Visual Studio
 - ▣ You can import WSP for re-usable workflow to VS 2010
 - Use Event Handlers or other custom code to augment workflow

SharePoint Forms

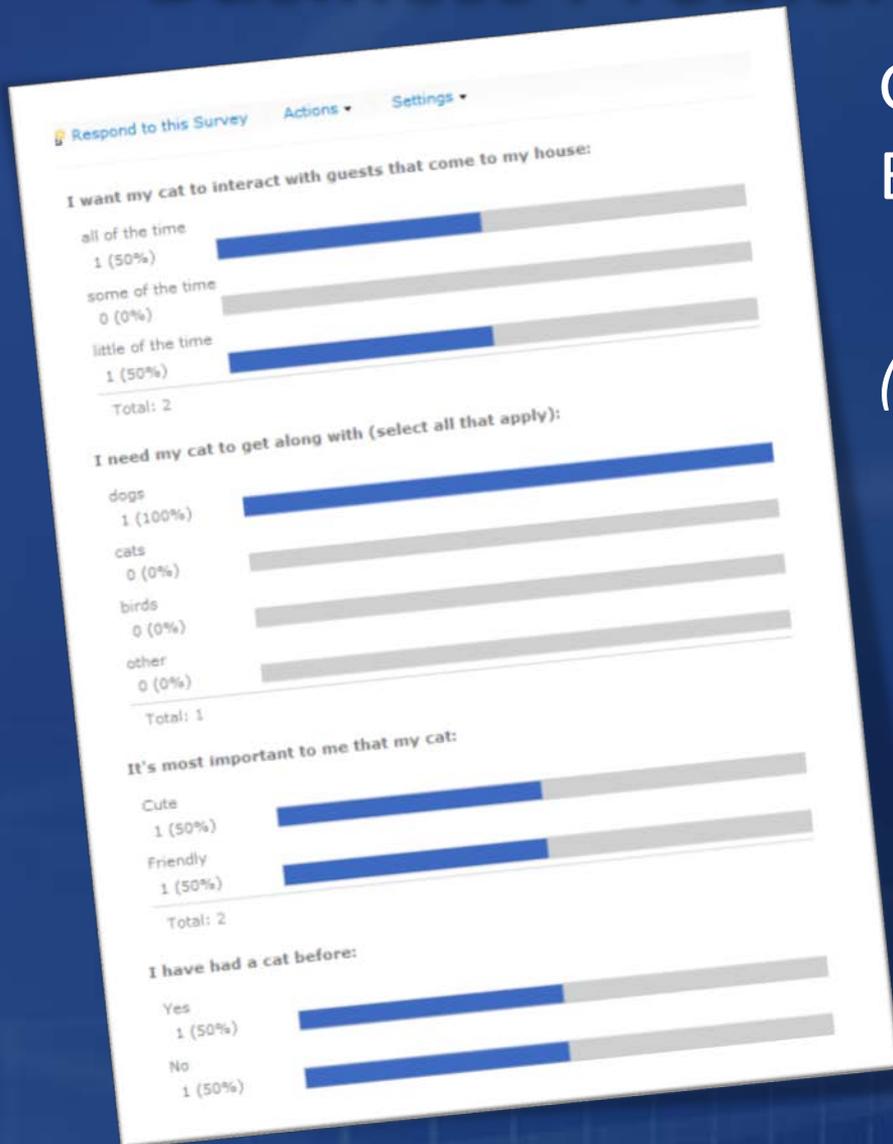
Forms, Forms, Forms

Business Problems

What's a Forms Project?

- *Every project 😊*
- *All projects have some user interface components that could be classified as a “form”*
- *Can I use the OOB List Forms or do I need more?*
- *What is the business process?*
 - *Do I have a literal paper form that I am automating?*
 - *Many, many times there is a workflow component of a forms project!*

Business Problem – Data Collection



Get Information from Employee, Customer, etc.

- Utilize standard list forms (survey, custom)

- Define data entry rules

- Configure list security

- Use workflows if needed

- Customize using designer if needed

Business Problem – Paper Form Automation

Automate a Paper Form.

Use InfoPath

- *Is it web based?*
- *Use all your workflows skills*
- *Design with InfoPath Designer*
- *Integrate with 3rd party (non-sharepoint data)*

SUBSCRIBING MEMBERSHIP APPLICATION FORM

I wish to apply for membership of Medical Defence Malaysia Berhad. Once elected to membership by the Board of Medical Defence Malaysia Berhad, I agree to be bound by the articles of association of Medical Defence Malaysia Berhad. I declare that the information given below is true and correct.

PERSONAL DETAILS

Name :	D.O.B.:	
IC No.:	Next of Kin:	
Residential Address :		
Postal Code :		
Practice Address :		
Postal Code :		
Telephone : (Residence)	Handphone :	E-mail :
Telephone : (Practice)	Fax :	(Practice)
Address for Correspondence :	<input type="checkbox"/> Practice	<input type="checkbox"/> Residence

PRACTICE DETAILS

Basic Degrees :	Date Obtained :
University :	
Postgraduate Qualification:	Date Obtained :
University / Professional body :	
Malaysian Medical Council Registration No. :	Year Commenced Practice as GP / Specialist :
Date of Registration :	Type of current practice, e.g. : employer indemnified, private practice, etc.:
Membership Category :	
Registration with National Specialist Register (NSR) <input type="checkbox"/> yes <input type="checkbox"/> no	
National Specialist Registration No. :	
Annual Practising Certificate No. :	(Please enclose current photocopy)
Does your employer indemnify you for any of your work ? <input type="checkbox"/> yes <input type="checkbox"/> no	
(if yes, please provide full details)	

Failure to notify MDM Bhd of any change of address or scope of practice could result in suspension or termination of your benefits.

INDEMNITY HISTORY

1a. Have you ever been a member of a defence organisation or held a policy of professional indemnity insurance?
 Yes No If yes, name of organisation _____
Date of Joining : _____ Date of Resignation : _____

SharePoint Forms Tools



Business Analyst
Form Designer/Power User

Setup Lists and
Columns

Design Data Rules



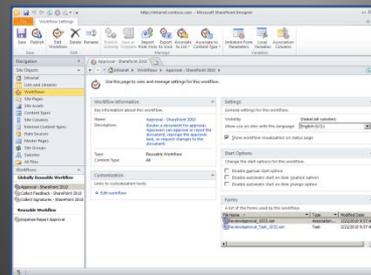
Microsoft
SharePoint Designer 2010



Form Designer

Designer List Forms

InfoPath List Forms



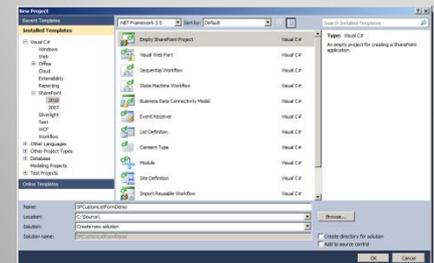
Microsoft
Visual Studio 2010

Professional developer

Web Parts

ASP.NET Forms

Web Services



InfoPath - Usage in SharePoint

- ▣ Custom List Forms
 - Customize the OOB list forms
 - Limit which information users can change
 - Provide alternative views
- ▣ Form Libraries
 - Paper Form Automation
 - Integrated 3rd Party Data
 - Complex data structure within the form
- ▣ Workflow: Association, Initiation, Tasks etc.
 - For building forms within a workflow
- ▣ External List Forms
 - UI for editing data from external systems

InfoPath Forms vs. Form Templates

- ▣ Form Templates are form designs
 - Empty Form
 - Created using InfoPath Designer
 - Hosted or standalone

- ▣ Forms are “Filled Out Forms”
 - XML documents
 - Includes data entered
 - Filled using InfoPath Filler or browser
 - Can be submitted anywhere
 - Contain link to Form Template

InfoPath in SP2010 - Advantages

- ▣ Easy and quick way to generate forms for Custom and External Lists
- ▣ Decent WYSIWYG form designer
- ▣ Extensibility

Common InfoPath Limitations

- ▣ Browser-enabled forms lack true Web experience
- ▣ More or less complex scenarios require strong technical knowledge
- ▣ Printing capabilities
- ▣ Reporting (especially with repeating sections)
- ▣ Form Libraries:
 - Need to create a form library though it's not always a business requirement
 - For columns of type Person there is not standard way of passing the values

Limitations of Custom List Forms

- No support for document libraries
- No support for managed metadata columns
- No way to publish somewhere else and/or reuse
- No way to generate form for content type
- No support for custom code

InfoPath Forms: Gotchas

- ▣ Extracting and Reporting on Form Information
 - Many times data is embedded within XML Completed form
 - Example : Expense Report
- ▣ “WorksOnMyMachinitis”
 - Authentication problems for 3rd party data
 - Even accessing SP data can be problematic
 - “Double Hop” when deploying to production farm
- ▣ Printing
 - Printing Completed Forms not what it should be

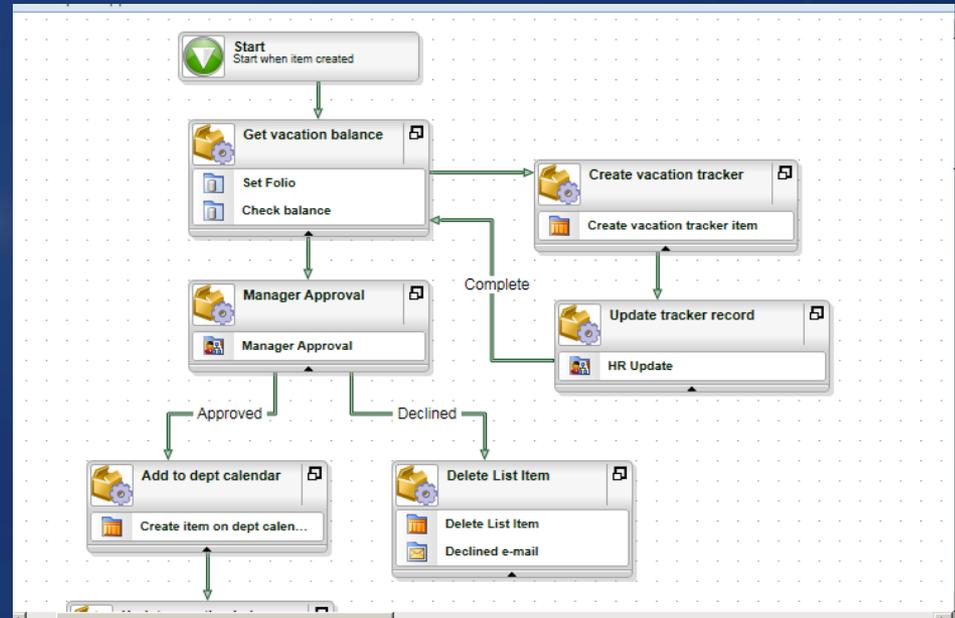
3rd Party Products

SharePoint Add-Ons

3rd Party Add-Ons - K2



- Visual Designer based in SharePoint
- Implement workflow logic without code
 - Also has Visual Studio integration
- Rich visual designer from SharePoint
- Connect to AD or LOB data sources



3rd Party Add-Ons - Nintex

- ▣ Expand workflows beyond SharePoint Designer
- ▣ Implement workflow logic without code
- ▣ Rich visual designer from SharePoint
- ▣ Connect to AD or LOB data sources

