



How to Build a Management Dashboard with SharePoint

Dux Raymond Sy, PMP

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DOE Web Collaboration

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Presentation Objectives

- After completing this presentation, you will learn how SharePoint can be leveraged to build a management dashboard by:
 - Displaying relevant reports with custom views
 - Developing visually relevant key performance indicators (KPI) using out of the box tools and/or third party products
 - Automate status reporting with SharePoint alerts

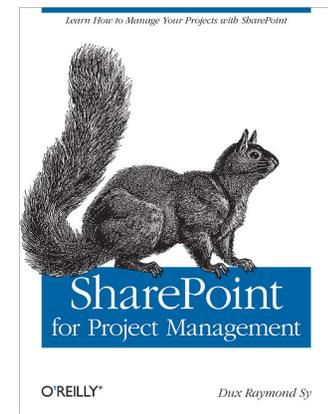




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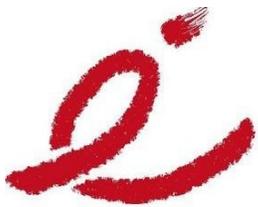


- Managing Partner, Innovative-E, Inc.
 - Author, "SharePoint for Project Management" by O'Reilly Media
 - Contract Author & Instructor, Learning Tree International
-
- For more information, connect with Dux
 - E-Mail: dux.sy@innovative-e.com
 - LinkedIn: meetdux.com/li
 - Blog: meetdux.com
 - Twitter: twitter.com/meetdux



Agenda

- What is a Management Dashboard?
- Identify Metrics
- Create SharePoint Lists
- Displaying Visual Indicators with Web Parts
- Automated Notification with Alerts
- Questions and Answers



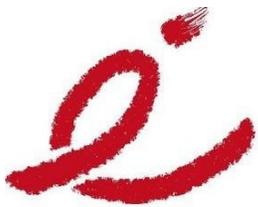
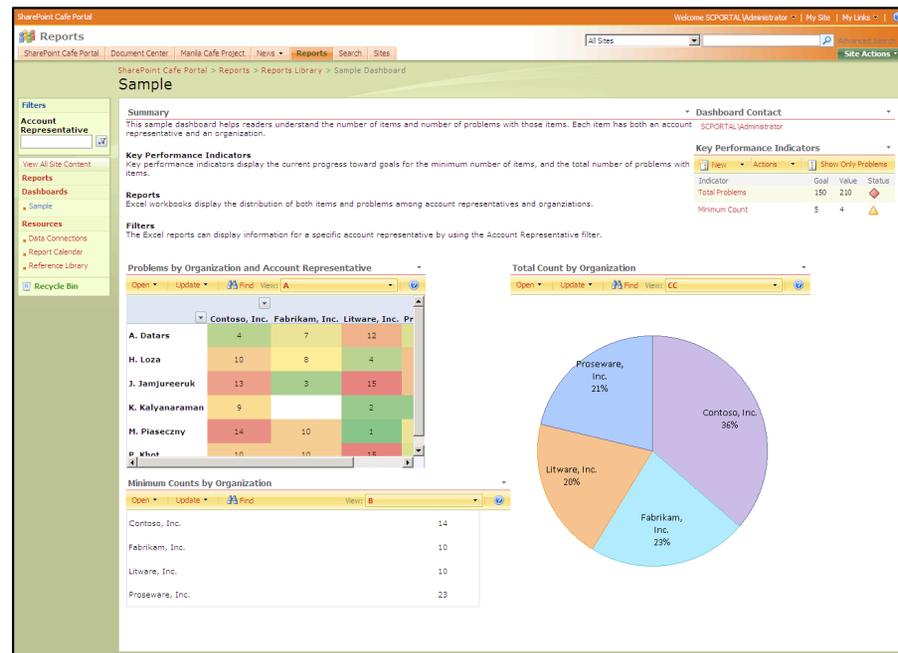
Management Dashboard

- A management reporting tool that is used to
 - Provide interactive summary of a management report
 - Consolidates, aggregates, and arranges measurements in a visual representation
 - Displayed on a single screen so information can be monitored at a glance



Why SharePoint?

- Built-in capabilities to easily create dashboards





Examples: Recovery.gov + VDOT



The image displays two web dashboards side-by-side. The left dashboard is Recovery.gov, and the right is the VDOT Performance Reporting System.

Recovery.gov Dashboard

U.S. TOTAL
 for federal contracts, grants and loans as reported by recipients under Section 1512 of the Recovery Act

640,329
 JOBS CREATED/SAVED AS REPORTED BY RECIPIENTS
 10/30/2009

CONTRACTS
 AWARDED: 21,881
 UP FOR BID: 5,063 (More Than 80% Completed), 25,932 (Less Than 50% Complete)

GRANTS
 4,110 Completed

DATA, DATA & MORE DATA
 Funds Awarded by Award Type:
 Contracts: \$17,650,415,935
 Grants: \$139,377,946,601
 Loans: \$1,676,966,275

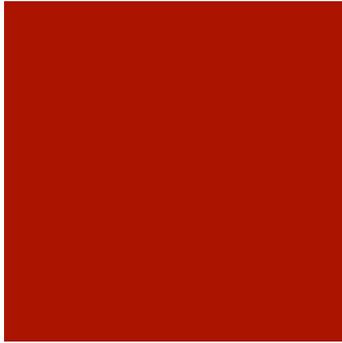
VDOT Dashboard

PERFORMANCE REPORTING SYSTEM FOR PROJECTS AND PROGRAMS

- PERFORMANCE:** 82% (Congestion Free Travel on Interstates Daily Updates)
- SAFETY:** 647 (Highway Deaths Since the Beginning of the Year)
- CONDITION:** 77% (Quality of Road Surface)
- FINANCE:** 6% (YTD Planned vs. Actual Expenditures (Variance))
- VDOT MANAGEMENT:** 5 (Management Performance Areas)
- CITIZEN SURVEY RESULTS:** 91% (On Time)
- PROJECTS:** 91% (On Time)

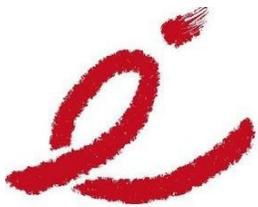
Commonwealth Transportation Commissioner: David S. Ekern, P.E.

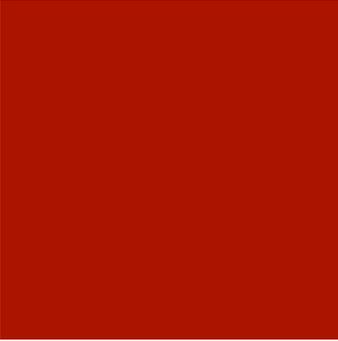




4 Steps to Create a Dashboard in SharePoint

1. Identify Metrics
2. Create SharePoint Lists
3. Deploy Visual Indicators with Web Parts
4. Automate Notification with Alerts

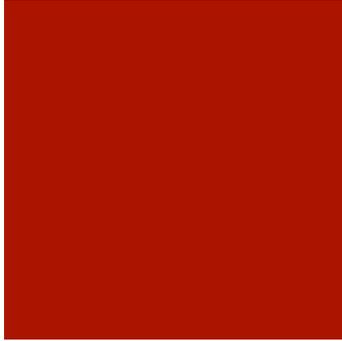




Agenda

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#1: Identify what you want to measure

- What critical elements of your organization do you measure?
 - Schedule
 - Budget
 - Risks
 - Performance
 - _____

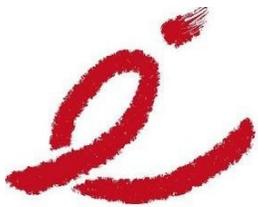


The only man who behaved sensibly was my tailor; he took my measurement anew every time he saw me, while all the rest went on with their old measurements and expected them to fit me.

—George Bernard Shaw, Essayist and Nobel laureate

Example: Project Management

- Good estimation culture
 - Duration
 - Effort
 - Resource
- Project Tracking
 - Comparing planned vs actual
 - Metrics (% vs actual time/cost/duration)
- Project Reporting
 - Establish Key Performance Indicators (KPI)
 - Metrics (what constitutes on schedule vs late?)



Agenda

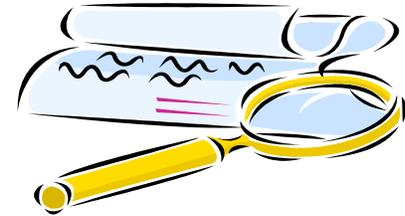
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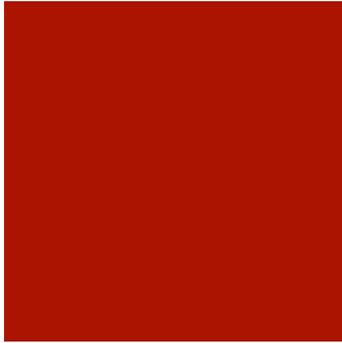


#2: Create SharePoint List

- Create and define relevant lists
 - Milestones
 - Budget
 - Project Schedule

- Define custom views if relevant
 - Used to match user or group interest
 - For example, we are interested in viewing project documents that were modified by the sponsor during project initiation





Example: Project Milestone List

SharePoint Cafe Portal > Manila Cafe Project

Welcome SCPORTAL\Administrator | My Site | My Links | ?

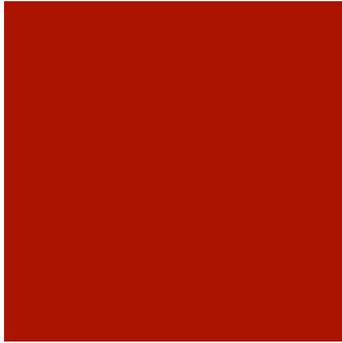
Manila Cafe Project | All Sites | Advanced Search | Site Actions

Manila Cafe Project > Reports > Milestones

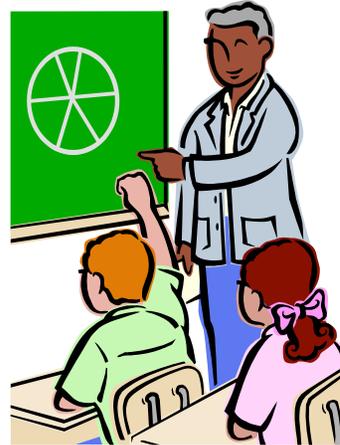
Milestones | View: All Items

Milestone	WBS	Baseline Finish	Actual Finish	Variance
Project Initialised NEW	1.2	3/12/2009	3/14/2009	2
Location Identified NEW	1.4	3/18/2009	3/18/2009	0
Suppliers Identified NEW	1.5	4/29/2009	4/20/2009	-9
Marketing Initiative Started NEW	1.6	4/22/2009	4/29/2009	7
Recruitment Completed NEW	1.7	3/18/2009	3/18/2009	0
IT Systems Integrated NEW	1.8	3/18/2009	3/20/2009	2
Cafe Opens NEW	1.9	11/6/2009	11/7/2009	1





Demonstration



Creating a Project Milestone List



Agenda

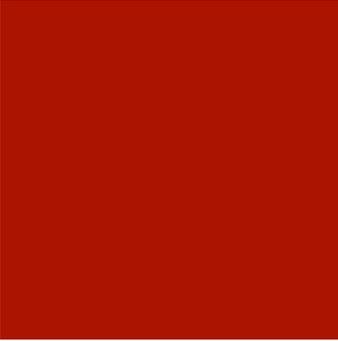
- What is a Management Dashboard?
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- **Displaying Visual Indicators with Web Parts**
- Automated Notification with Alerts
- Questions and Answers



#3: Create Dashboard with Web Parts

- Web Parts are customizable software component
 - Created in a Microsoft development environment
- Benefits
 - Reduces complexity of integrating new site functionalities for non-programmers
 - Common Web Parts are available from Microsoft and third-party providers
- Web Parts available for visual indicators
 - MOSS KPI Web Parts
 - Third-Party Web Parts





MOSS KPI Web Parts

- Available out of the box with the Record Center site template
- To leverage KPI Web Parts
 - Relevant list should be available
 - Create a KPI List
 - Display the KPI Web Part





Example: Defining the Milestones KPI List

Manila Cafe Project > Reports > Milestones KPI > Milestones > Edit Item

Milestones KPI: Milestones

[Delete Indicator](#)

Name and Description
Enter the name and description of the indicator.
The description explains the purpose or goal of the indicator.

Comments
Comments help explain the current value or status of the indicator.

Indicator Value
The indicator value is the number that tracks the progress toward the goal of this indicator.
For example, the indicator
The number of issues that
Or
The percentage of tasks
To specify the indicat
1) Select the SharePoint

Name
Milestones

Description

Comments

SharePoint List and View:
List LIB1

Status Icon
The status icon rules determine which icon to display to represent the status of the indicator.
For some indicators, such as 'The percentage of tasks completed', better values are usually higher.
For other indicators, such as 'The number of active tasks', better values are usually lower.

To specify the status icon rules:

- 1) Select whether better values are higher or lower
- 2) Specify the 'Goal' value
- 3) Specify the 'Warning' value

Status Icon Rules:
Better values are: lower

Display when value is less than goal: 0

Display when value is less than warning: 2

Display otherwise

[Details Link](#)

[Update Rules](#)

OK Cancel





Example: Viewing the Milestones KPI List

Manila Cafe Project > Reports > Milestones KPI > Milestones

Milestones KPI: Milestones

[Edit Indicator](#) | [Delete Indicator](#) | [Manage Permissions](#)

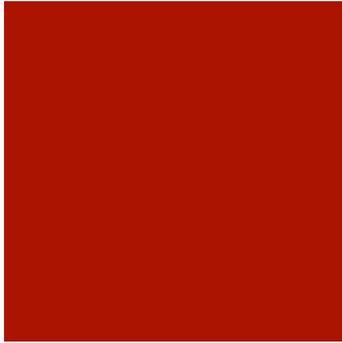
[Go Back](#)

	Title	Milestones
	Description	
	Comments	
	Value	0.43
	Goal	0
	Warning	2
	List	Milestones

New | Actions | Settings | View: **All Items**

Milestone	WBS	Baseline Finish	Actual Finish	Variance
Project Initialised !NEW	1.2	3/12/2009	3/14/2009	2
Location Identified !NEW	1.4	3/18/2009	3/18/2009	0
Suppliers Identified !NEW	1.5	4/29/2009	4/20/2009	-9
Marketing Initiative Started !NEW	1.6	4/22/2009	4/29/2009	7
Recruitment Completed !NEW	1.7	3/18/2009	3/18/2009	0
IT Systems Integrated !NEW	1.8	3/18/2009	3/20/2009	2
Cafe Opens !NEW	1.9	11/6/2009	11/7/2009	1





Example: Displaying the Milestones KPI WP

SharePoint Cafe Portal > Manila Cafe Project

Welcome SCPORTAL\Administrator | My Site | My Links

Manila Cafe Project

All Sites [Search] Advanced Search

Manila Cafe Project [Site Actions]

View All Site Content

Documents

- Project Templates

Lists

- Calendar
- Change Request
- Contacts
- Issues
- Project Team Tasks
- Milestones

Recycle Bin

Key Performance Indicators

Indicator	Status
Milestones	⚠

Project Templates

Type	Name	Modified By
	Dojo Locations NEW	SCPORTAL\Administrator
	Expense Report NEW	SCPORTAL\Administrator
	Expense Reporting Procedure NEW	SCPORTAL\Administrator
	Change Impact Analysis NEW	SCPORTAL\Administrator

Add new document

Calendar

Title	Start Time	End Time
Status Meeting NEW	4/10/2009 8:00 AM	6/16/2009 8:30 AM
Review Barista Application NEW	4/13/2009 2:00 PM	4/13/2009 5:00 PM

Add new event

Contacts

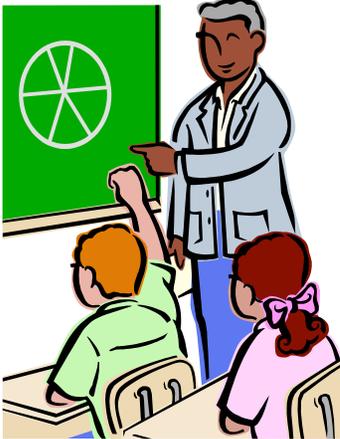
Last Name	First Name	Business Phone	E-mail Address
Sy NEW	Dux		dux.sy@innovative-e.com

Add new item

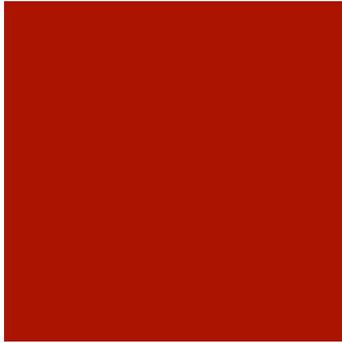




Demonstration

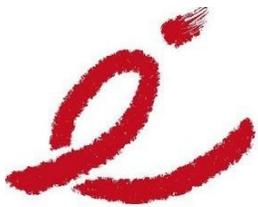


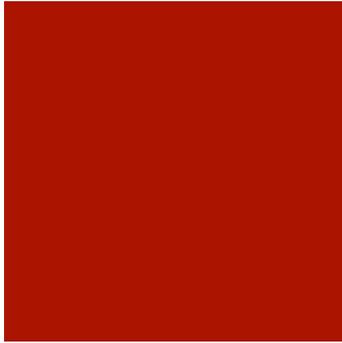
Defining Visual Indicators with MOSS KPI web parts



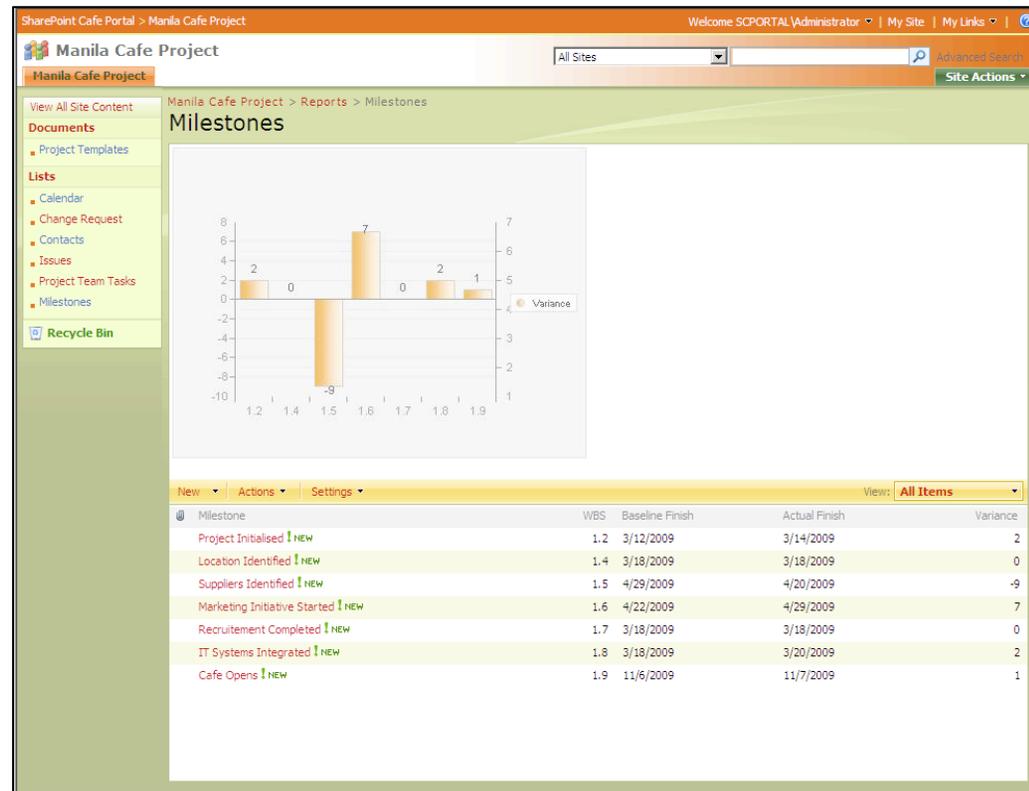
What if we are using WSS?

- WSS does not have KPI web parts available out of the box
- Options
 - Purchase Third Party web parts
 - Code JavaScript or JQuery with Content Editor Web Part
 - Details can be found at EndUserSharePoint.com
 - Utilize SharePoint Designer
 - Utilize Visual Studio .NET





Example: Bamboo Chart Plus Web Part





Additional Third-Party Dashboard Tools

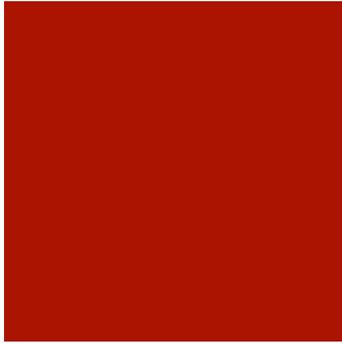
- Third-party web parts are available to create dashboards
 - Bamboo Solutions
 - Dundas



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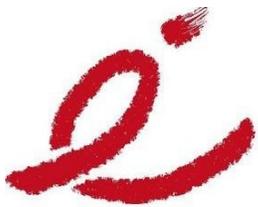
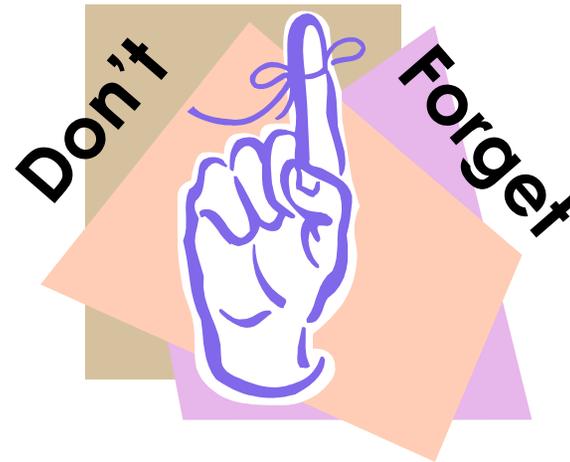
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Automated Reminders

- SharePoint alerts
 - Receive e-mail notifications when list items change
- How can this feature be valuable?





Example: Setting Alerts

Manila Cafe Project > Reports > Milestones > New Alert

New Alert

Use this page to create an e-mail alert notifying you when there are changes to the specified item, document, list, or library.
[View my existing alerts on this site.](#)

OK Cancel

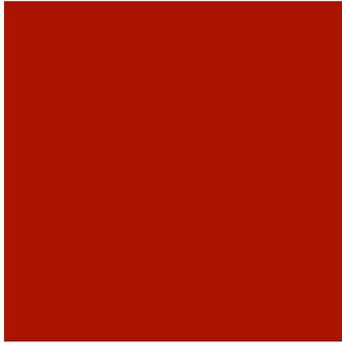
Alert Title Enter the title for this alert. This is included in the subject of the e-mail notification sent for this alert.	<input type="text" value="Milestones"/>
Send Alerts To You can enter user names or e-mail addresses. Separate them with semicolons.	Users: <input type="text" value="SCPORTAL\Administrator"/>  
Change Type Specify the type of changes that you want to be alerted to.	Only send me alerts when: <input checked="" type="radio"/> All changes <input type="radio"/> New items are added <input type="radio"/> Existing items are modified <input type="radio"/> Items are deleted
Send Alerts for These Changes Specify whether to filter alerts based on specific criteria. You may also restrict your alerts to only include items that show in a particular view.	Send me an alert when: <input checked="" type="radio"/> Anything changes <input type="radio"/> Someone else changes an item <input type="radio"/> Someone else changes an item created by me <input type="radio"/> Someone else changes an item last modified by me
When to Send Alerts Specify how frequently you want to be alerted.	<input checked="" type="radio"/> Send e-mail immediately <input type="radio"/> Send a daily summary



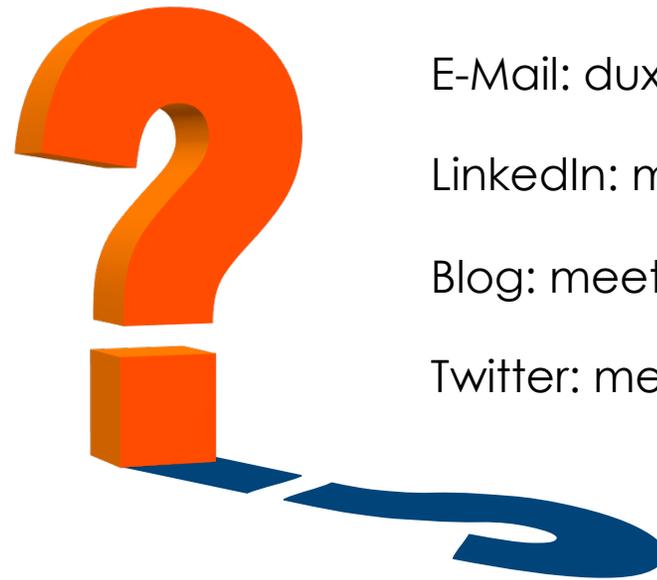
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Questions?



E-Mail: dux.sy@innovative-e.com

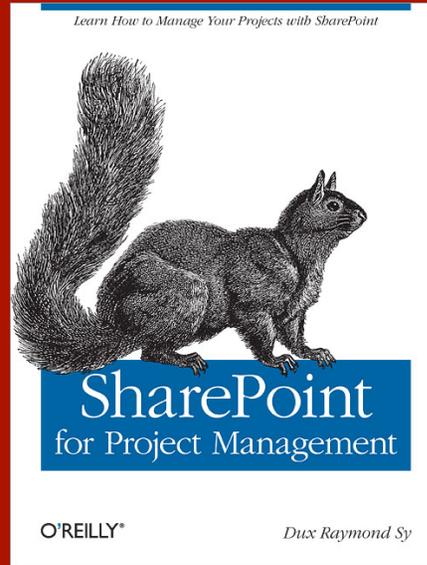
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Thank
You!

