

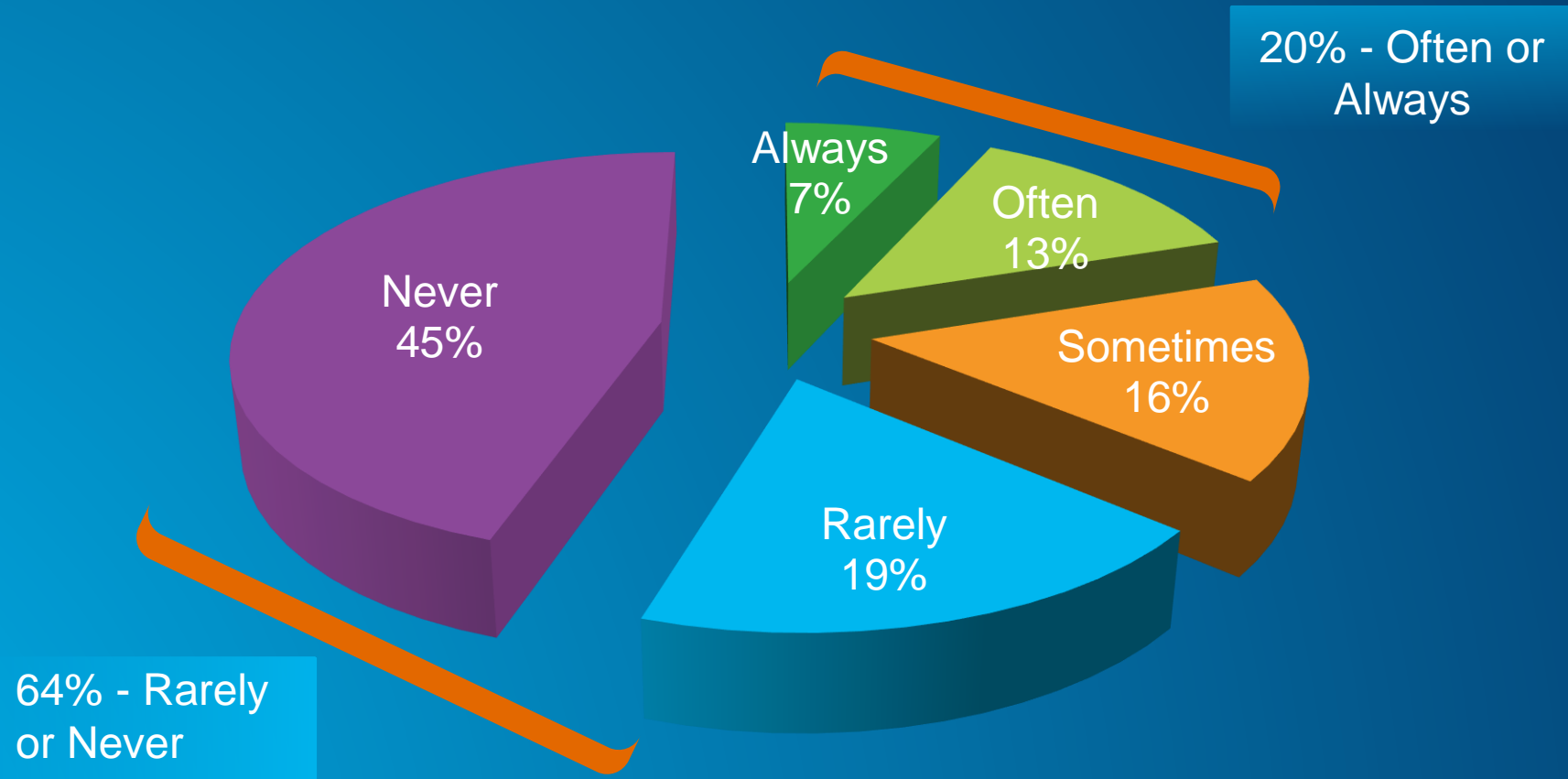
# When is Agile the Best Project Management Methodology

Lana Tylka



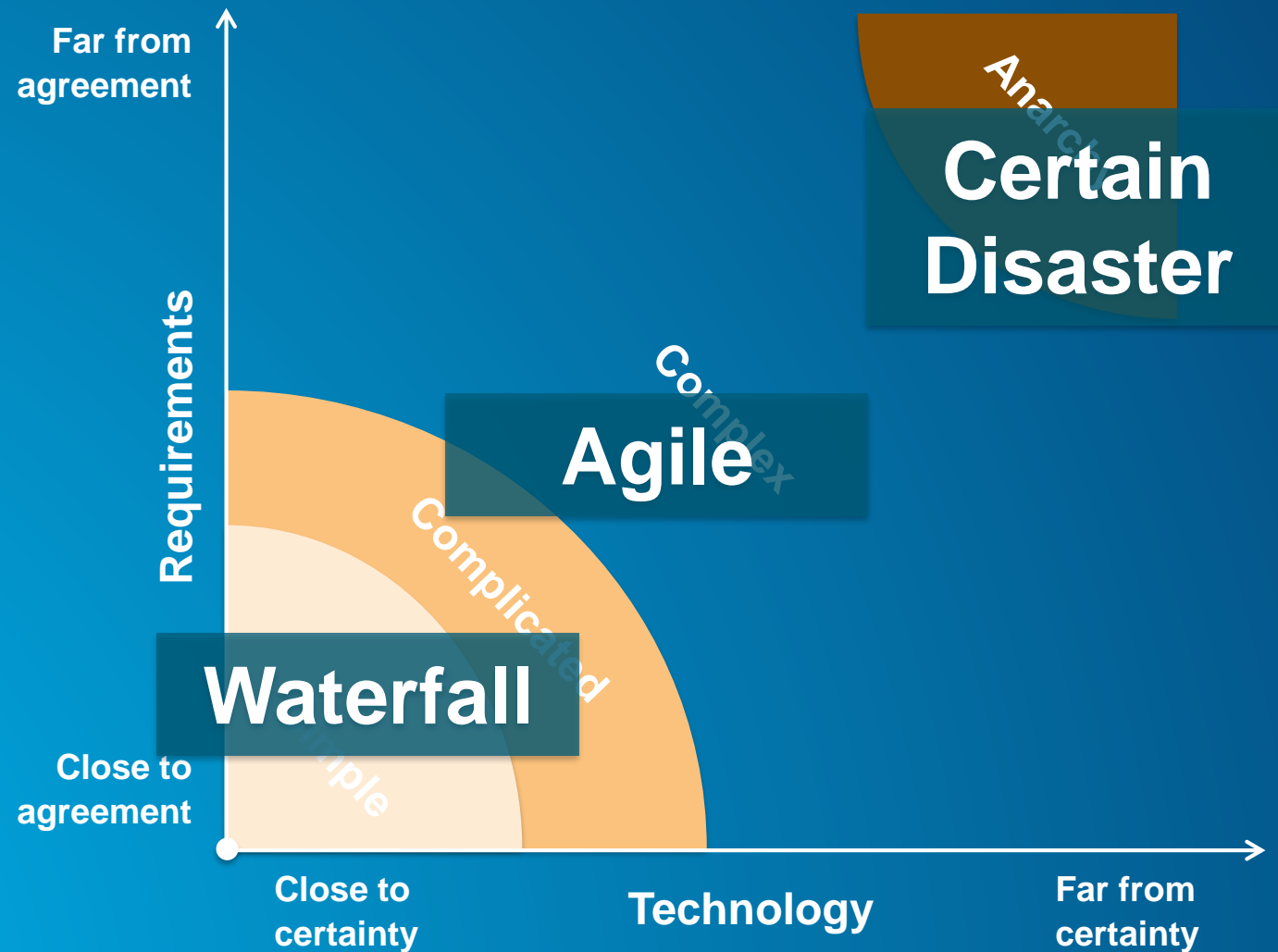
# Build for Value

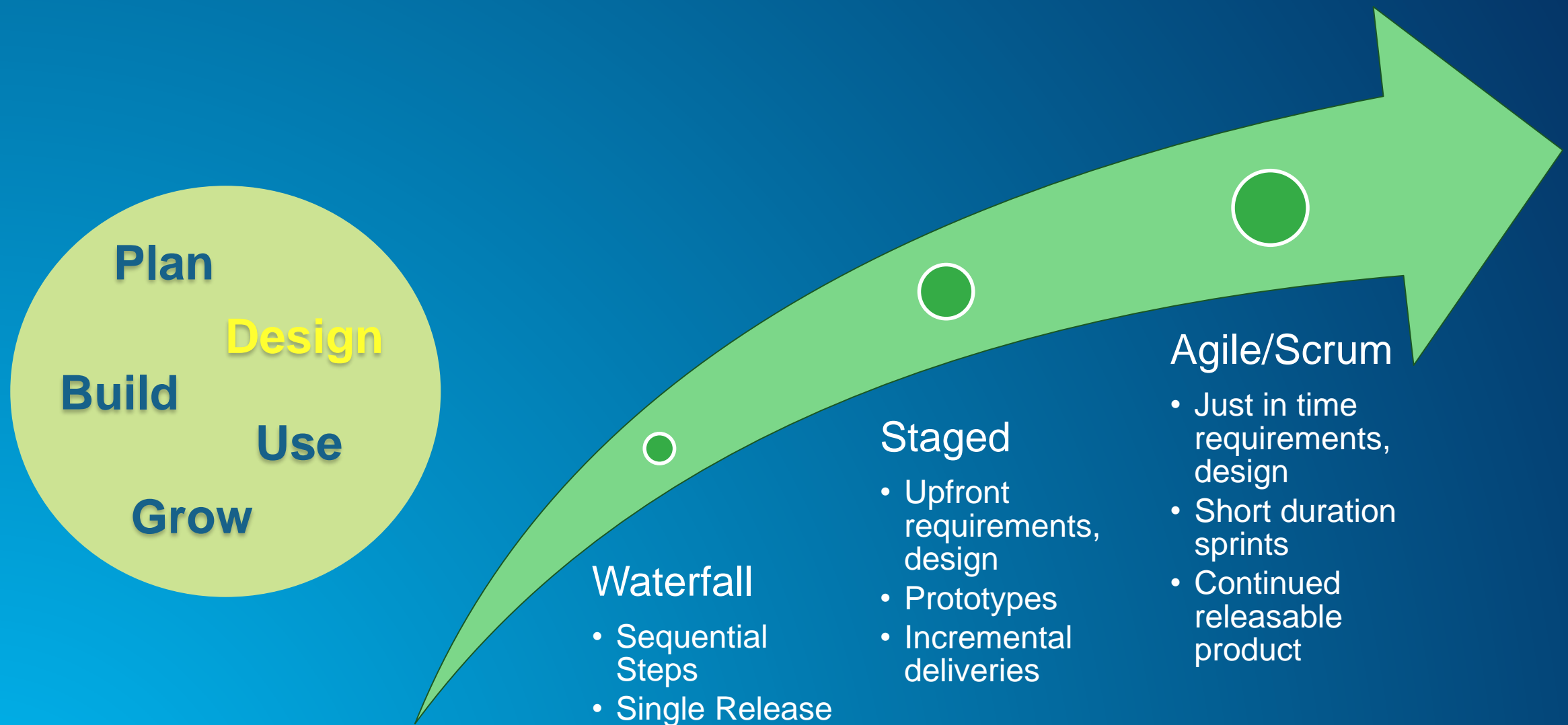
Requirements evolve over time



Standish Group Study Reported at XP2002 by Jim Johnson, Chairman

# How Requirements, Technology Affect your Choice of Project Lifecycle





# When would you use Agile?

	Agile	Staged Delivery	Waterfall
Scope, Technology, Contract	<ul style="list-style-type: none"><li>• Flexible scope, deliverables</li><li>• One or several applications</li></ul>	<ul style="list-style-type: none"><li>• Several applications</li><li>• Prototypes expected</li></ul>	<ul style="list-style-type: none"><li>• Clear requirements</li><li>• Fixed deliverables</li><li>• Single application</li></ul>
Size, Duration	<ul style="list-style-type: none"><li>• Any size or duration project</li></ul>	<ul style="list-style-type: none"><li>• Medium or large size, mid to long duration</li></ul>	<ul style="list-style-type: none"><li>• Small size, short duration project</li></ul>
Capacity, Capabilities, Environment	<ul style="list-style-type: none"><li>• Customer EXPECTS collaboration</li><li>• Stable, experienced project team</li></ul>	<ul style="list-style-type: none"><li>• Capacity, resources, and environment to support multiple releases</li></ul>	<ul style="list-style-type: none"><li>• Limited capacity, resources, and environment</li><li>• Frequent turnover on project team</li></ul>

# Estimating





# Big Picture

## Epics



System  
Architecture

Database  
Design

Widget

**Story point** is a arbitrary measure used by Scrum teams. This is used to measure the effort required to implement a **story**. In simple terms its a number that tells the team how hard the **story** is. Hard could be related to complexity, Unknowns and effort. In most cases a **story point** range is 1,2,3,5,8,13,21,34,45

## Story Points



21

34

34

45

21

## Story Points

21

34

34

55

21

**x 8**

## Hours

168

272

272

440

168



## Pricing Sheet

Activity	Scrum Master	Product Owner	Developer	Analyst	System Admin	Total
System Architecture	16	16	0	16	120	<b>168</b>
Geodatabase Design	24	24	0	184	40	<b>272</b>
Widget 1	24	24	176	48	0	<b>272</b>
Widget 2	40	40	280	80	0	<b>440</b>
Application Hardening	40	16	84	24	4	<b>168</b>

# Project

## System Architecture

1.1 User Story

1.2 User Story

## Database Design

2.1 User Story

2.2 User Story

2.3 User Story

## Widget 1

3.1 User Story

3.2 User Story

3.3 User Story

3.4 User Story

## Widget 2

4.1 User Story

4.2 User Story

4.3 User Story

4.4 User Story

4.5 User Story

## Application Hardening

5.1 User Story

5.2 User Story

# Managing



**As a [role], I can [feature] so that [benefit]**

**As a field representative,  
I want to collect information offline  
so that data can be collected  
in remote locations.**

# Product Backlog

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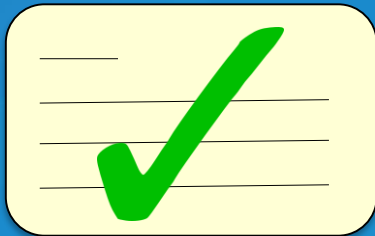
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## Wish List

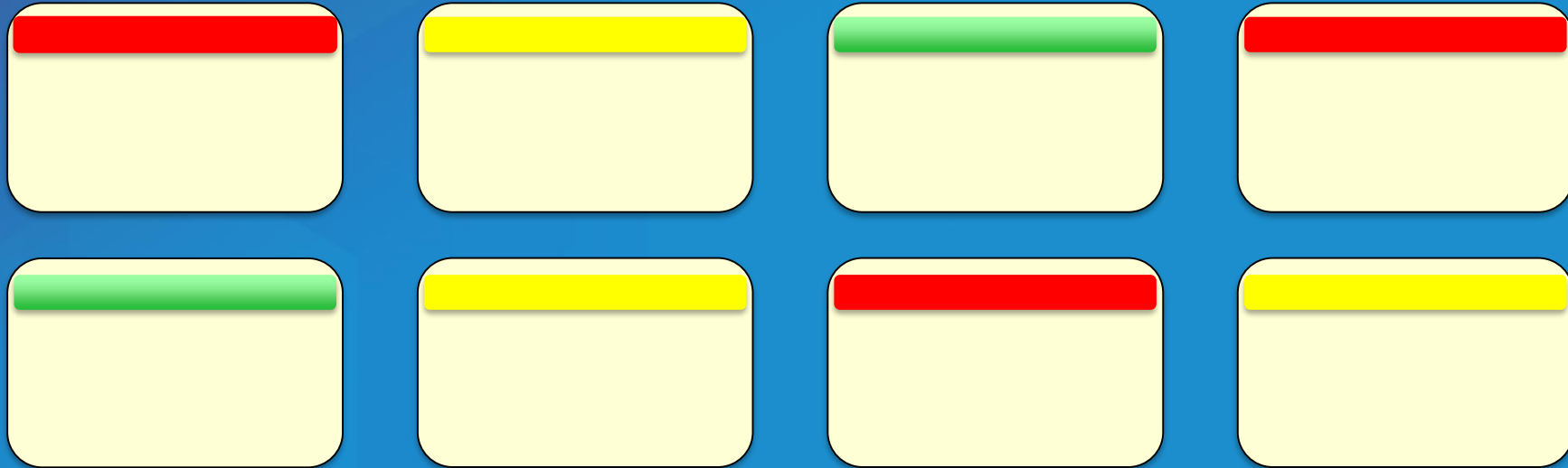
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## Sprint Backlog



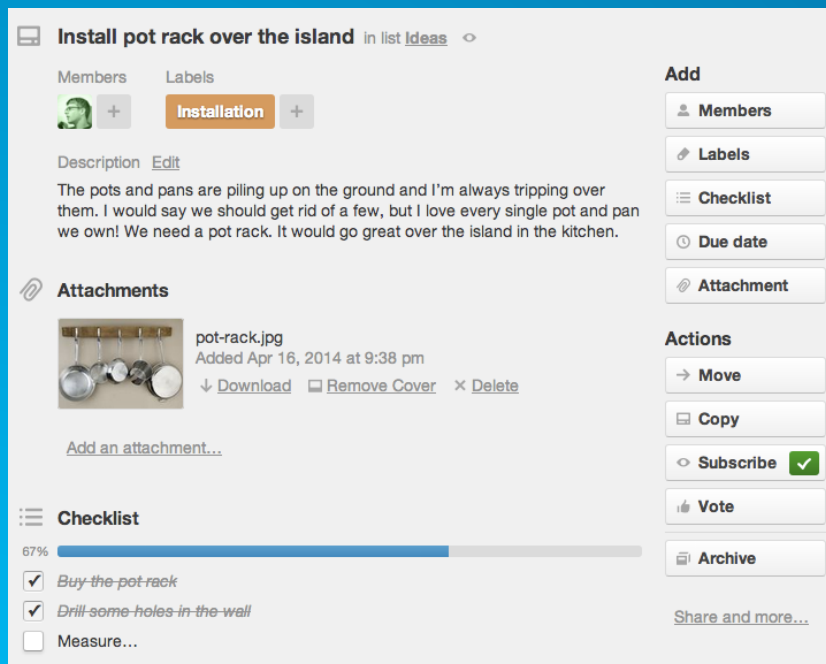
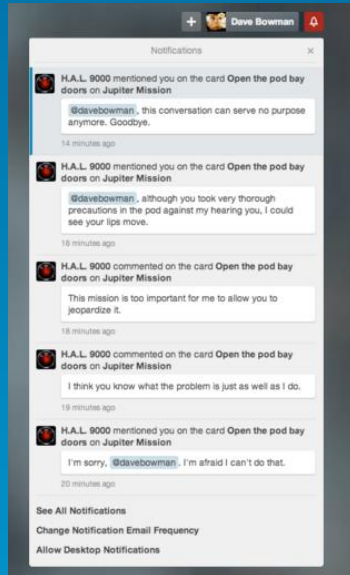
# Sprint Backlog



## Sprint Backlog



# Using Trello



# Using GitHub

This screenshot shows the GitHub interface for the repository 'waffle.io/ArcGIS/BayerCropScience'. The top navigation bar includes links for Code, Issues (176), Pull requests (0), Wiki, Pulse, and Graphs. Below this, there are filters for 'is:issue is:open' and buttons for 'Labels' and 'Milestones'. A 'New issue' button is also present. The main content area displays a list of issues, including:

- New pub for Survey123** (2 - In Progress, A - Doc-Dev, Priority=High) - #3355 opened 14 hours ago by marikavertzonis
- Question: Best version to be linking to from non-desktop help** (SubGrp=Apps) - #3348 opened 5 days ago by kylliedonia
- Localization: Workforce initial release help** (0 - Backlog, A - L10n, Area=L10n, SubGrp=Apps) - #3345 opened 5 days ago by kylliedonia
- Localization: Workforce initial release home** (0 - Backlog, A - L10n, Area=L10n, SubGrp=Apps) - #3344 opened 5 days ago by kylliedonia
- Incorrect appearance of table in AppStudio doc** (1 - Planned, A - Author, Priority=Moderate) - #3339 opened 6 days ago by marikavertzonis

This screenshot shows the 'Home' page of the ArcGIS documentation website. The page header includes the repository name 'ArcGIS / arcgis-doc-website' and navigation links for Code, Issues (176), Pull requests (0), Wiki, Pulse, and Graphs. The main content area includes a 'Home' section with a note about the sub-domain and a section titled 'What content goes on doc.arcgis.com?' with a list of links:

- AppStudio for ArcGIS
- ArcGIS.com Help
- ArcGIS for Smartphones & Tablets
- BAO
- Collector for ArcGIS
- Community Analyst
- Community Maps

This screenshot shows a Kanban board for the 'ArcGIS/BayerCropScience' repository. The board is divided into four columns: Backlog (106), Sprint Backlog (30), In Progress (11), and Needs Test (2). Each column contains a list of tasks or issues, each with a title, a status, and a priority. The tasks include:

- Backlog:** 873 Create "Notifications list" page, 965 Spatial Query Feature: Download/Export, 828 DB - Enable tracking of units for data layer attributes, 977 Protocol Report - Grayscale Version, 842 Confirm SST agX data ingest for a job step - wireframe.
- Sprint Backlog:** 919 Production Build 1.7, 740 Clarify Protocol Status & Job Status widgets (dev task), 899 Author cannot make edits to protocol that they copied, 889 Transparency slider will not change back to 0%, 970 Protocol Report Modal.
- In Progress:** 978 882 develop 2, 971 Remove the halo effect on the text symbol, 966 832 save confirm modal, 905 AgXPOC, 900 843 develop, 843 SST data loader.
- Needs Test:** 955 Change "Home" button to "Map View", 916 Number of notifications does not change upon deleting a notification.

# Use Tools to Manage Requirements

## Microsoft Team Foundation Server (TFS)

The screenshot displays the TFS web interface. At the top, there are tabs for 'Developing Requirements', 'Work Breakdown [Results]', and 'Start Page'. Below the tabs, a query results table lists requirements. The table has columns for ID, Iteration Path, Title, Requirement Type, Work Item, Priority, Assigned To, State, and Remarks. The first row is highlighted, showing requirement 1498 assigned to Glenn Berger in a 'Proposed' state.

ID	Iteration Path	Title	Requirement Type	Work Item	Priori...	Assigned ...	State	Rem
1498	SystemX\Increment 1	Solution should allow anyone in public to submit a request for service via a we...	Scenario	Requirement 2	Glenn Berger	Proposed		
1499	SystemX\Increment 1\Build 1	User has capability to add name and contact	Feature	Requirement 2	Glenn Berger	Proposed		
1500	SystemX\Increment 1\Build 1	System generates work order ID	Feature	Requirement 2	Glenn Berger	Proposed		
1501	SystemX\Increment 1\Build 3	System verifies email address	Feature	Requirement 2	Glenn Berger	Proposed		
1502	SystemX\Increment 1							
1503	SystemX\Increment 1\Build 1							
1504	SystemX\Increment 3							
1505	SystemX\Increment 3\Build 1							
1506	SystemX\Increment 2							
1507	SystemX\Increment 2\Build 1							
1508	SystemX\Increment 2\Build 1							
1509	SystemX\Increment 2\Build 1							

Below the table, a detailed view of requirement 1498 is shown. It includes fields for Title, Status, Assigned To, State, Reason, Planning, Priority, Triage, Blocked, and Committed. The 'Details' tab is active, showing a description of the requirement and a history of changes.

**Title:** Solution should allow anyone in public to submit a request for service via a web application  
**Requirement Type:** Scenario  
**Status:** Proposed  
**Assigned To:** Glenn Berger  
**Area:** SystemX  
**Iteration:** SystemX\Increment 1  
**Priority:** 2  
**Triage:** Pending  
**Blocked:** No  
**Committed:** No

**Description:**  
Use Case No.: 001  
Description: Submit service request  
1) User is prompted for name and contact info.  
2) User can select 'no'  
3) User is prompted with service types: tree trimming, pot hole, trash overflow, graffiti or other  
4) If 'other' user is prompted for comments  
5) User is prompted to assign priority (H,M,L)  
6) User is prompted to enter location via street intersection, street address or identification on a map  
7) System provides tracking number to user  
8) User is prompted if they want to be notified  
9) Upon work order completion user is emailed or contacted that issue has been resolved

**History:**  
7/16/2012 1:42:48 PM Edited by Glenn Berger  
7/16/2012 1:34:56 PM Edited by Glenn Berger  
7/16/2012 1:34:54 PM Created by Glenn Berger

## Rally Agile Implementation Tool

The screenshot shows the Rally Agile Implementation Tool interface. At the top, there are tabs for 'BACKLOG', 'PLAN', and 'TRACK'. The 'TRACK' tab is active, showing a backlog of requirements. The backlog is organized into columns based on status: 'Defined', 'In-Progress', 'Completed', and 'Accepted'. Each column contains a list of requirements with details such as ID, title, and assigned person.

**Defined:**

- DE136: The ValidateAll stored procedure does not include the 1000 foot buffer on the coasts. Iteration: Check Yes or No.
- DE131: Error found in US370: SIT209 needs IRWIN to pass a FIP's code in order to parse the proper County for an incident. Iteration: Check Yes or No.
- US206: Update Test Plan for Year Two utilization. Iteration: Check Yes or No.

**In-Progress:**

- US250: Identify Initial Requirements for Preventing duplicate UniqueIdentifiers upon Submit or Update. Iteration: Check Yes or No.
- US258: INCIWEB, EGP, Air Science, SmartFire, RSAC and CALFire need to read all 209 data elements in order to eliminate redundant data entry. Parent: US410: Additional Data Mapped to support Year Two requirements. Iteration: Check Yes or No.

**Completed:**




























- DE129: Error found in: All CreatedOnDateTime and ModifiedOnDateTime fields will be returned in millisecond resolution. Iteration: Check Yes or No.
- US414: WFOSS expressed need to validate UnitIDs. Parent: US415: Extended Teams need IRWIN to validate UnitIDs and message said validation. Iteration: Check Yes or No.

**Accepted:**

- US439: ROSS/eSuite/CAD Integration Meeting Preparation. Iteration: Check Yes or No.

<https://www.rallydev.com/>

# Making a Decision

Project Considerations	Trello	GitHub	TFS
Requirements are Proprietary			
Mobile App			
Easy to setup			
Estimation tools			
Scheduling tools			
Automated Burndown chart			
Easily integrated with Visual Studio for Code Repository			
Capacity Planning			
Exports to MPP and Excel			

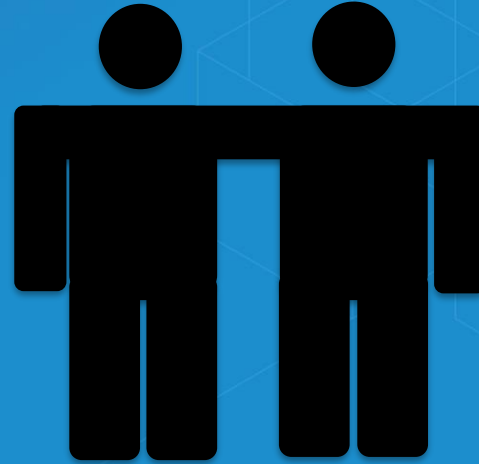


# Keys to Successful Sprinting!

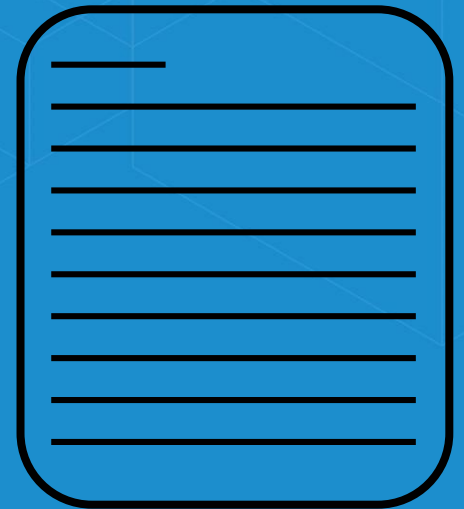
## Communication



## Trusted Partnerships



## Transparency



# Questions?



