

# Agile Development and GIS

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Presentation to the ESRI SWUG

# Overview

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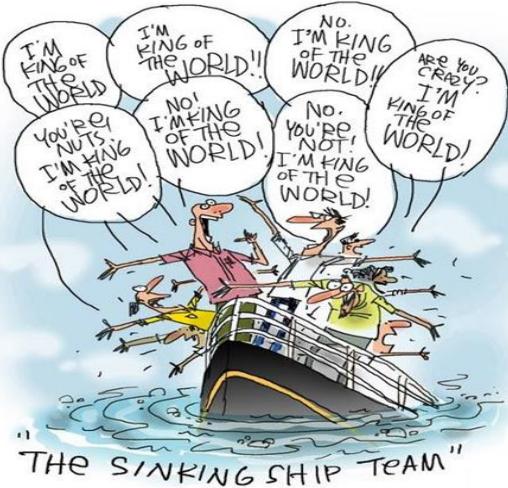
- What is agile development?
- Why agile works for GIS development?
- Example of how agile can be applied to GIS Tools/Software
- Starting with Agile

# What is Agile Development?

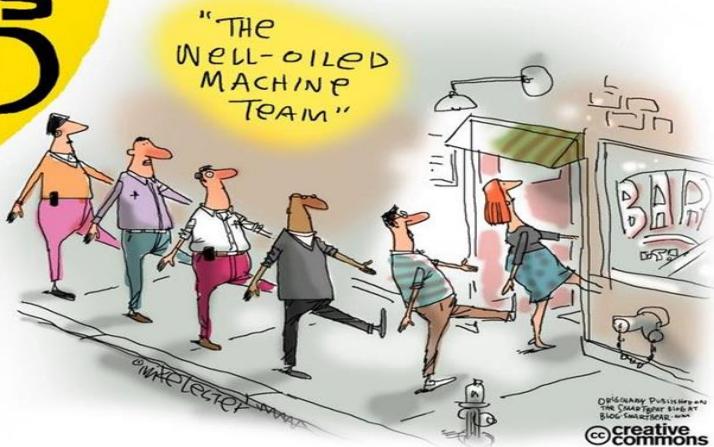
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- Individuals and Interactions *over* Process and Tools
- Working Software *over* Comprehensive Documentation
- Customer Collaboration *over* Contract Negotiation
- Responding to Change *over* Following a Plan

# Agile/Scrum Teams



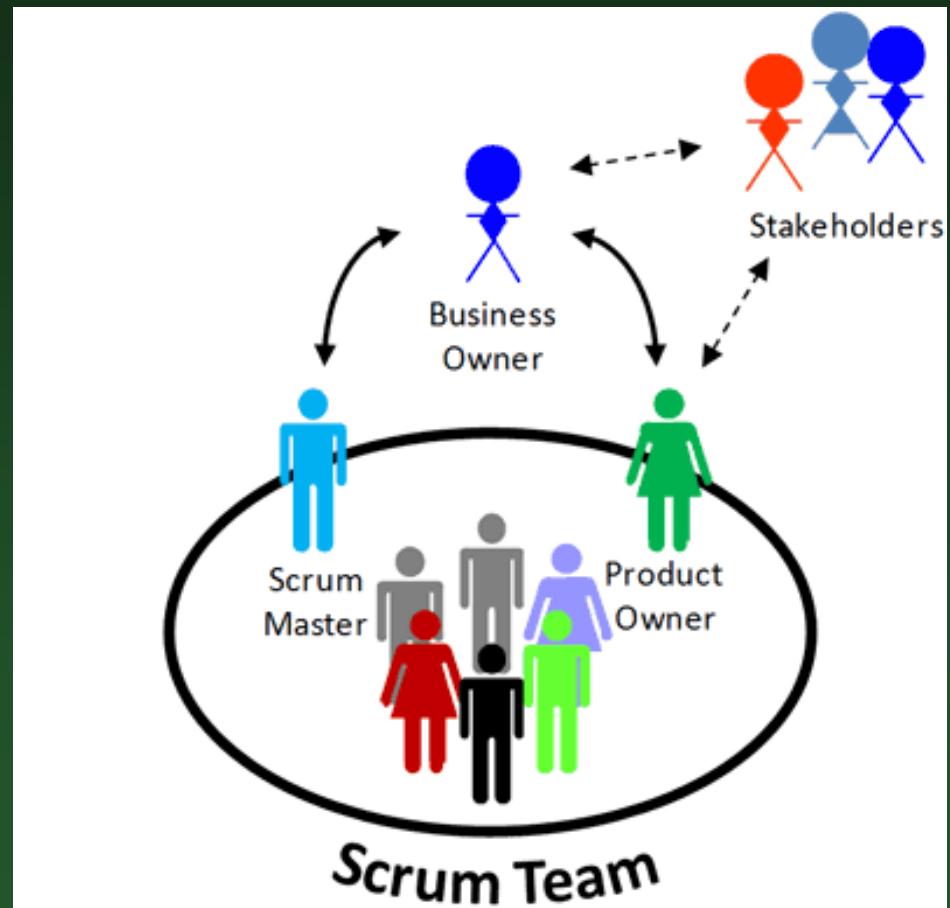
## TYPES OF AGILE TEAMS TO AVOID



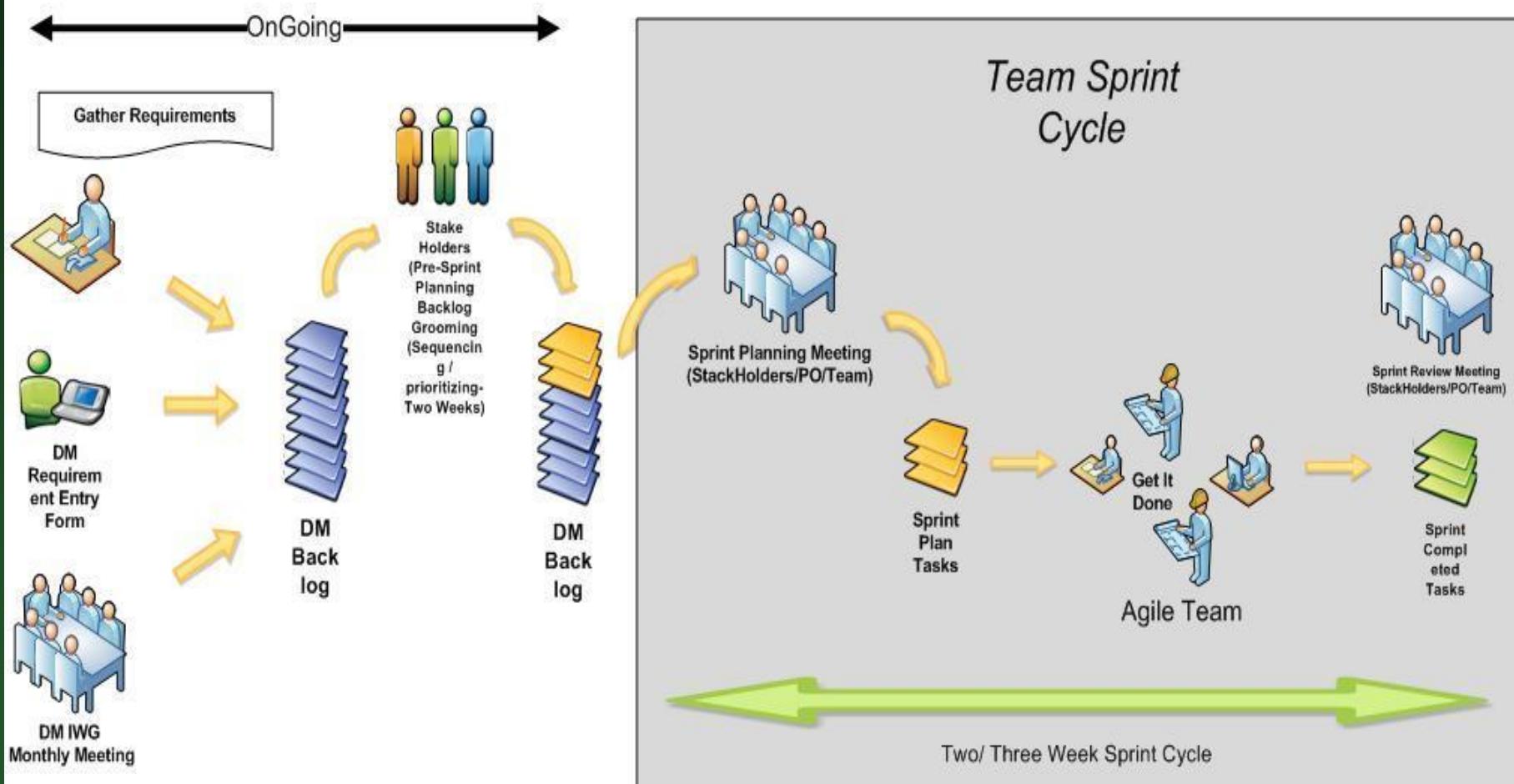
# Agile/Scrum Team

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- Usually small (3-10 people)
- Goal is to provide useful products and results for stakeholders.



# Sprint Workflow



# Why Agile works for GIS

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- Multipurpose
- Comprehensive view of goals/objectives
- Emphasis on improving
- Designed for resource sharing
- Trusted

# Example-Metadata Viewer

- Initiation
- User Story: As a National Hydrography Dataset (NHD) user, I want to be able to click on a feature and see its metadata.



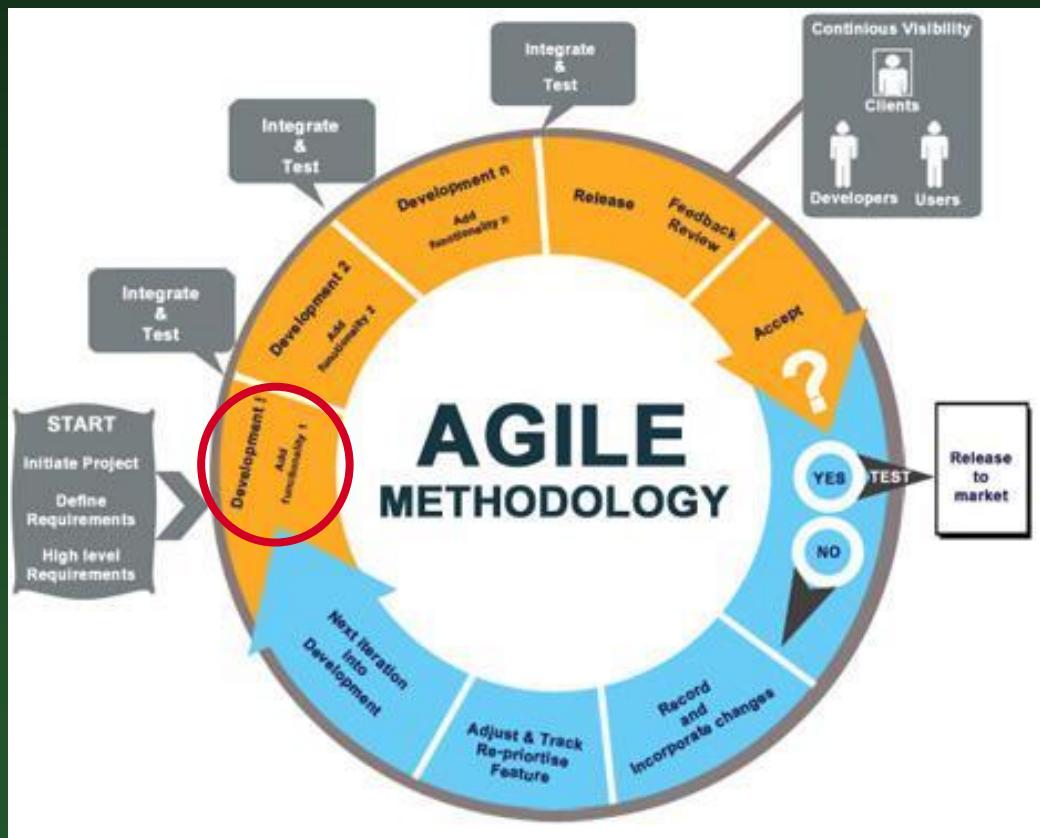
# Example-Metadata Viewer

- Planning Phase
- Desktop/Web?
- Just NHD or other themes?
- File gdb, personal, shapefiles, replicate checkouts?
- What information should be displayed?
- How does the user interact with the tool?



# Example-Metadata Viewer

- Execution
- Desktop
- Just NHD
- Geodatabase, replicate checkouts
- Display all Metadata and Source Information
- Interact by click and get a pop-up



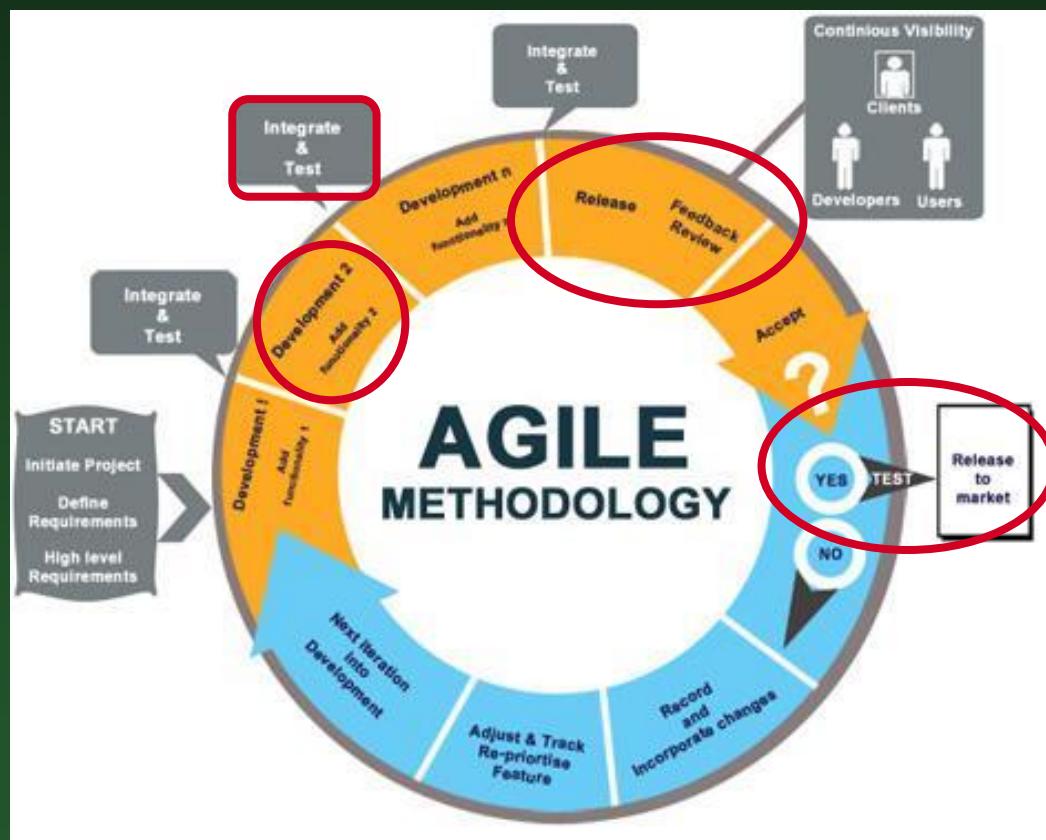
# Example-Metadata Viewer

- Review & Test
- Immediate feedback from PO and Stakeholders
  - Select multiple features
  - Make it look/behave like the identify tool
  - Tooltips
  - Automatic field sizing
  - Hierarchy of fields
  - More obvious highlighting



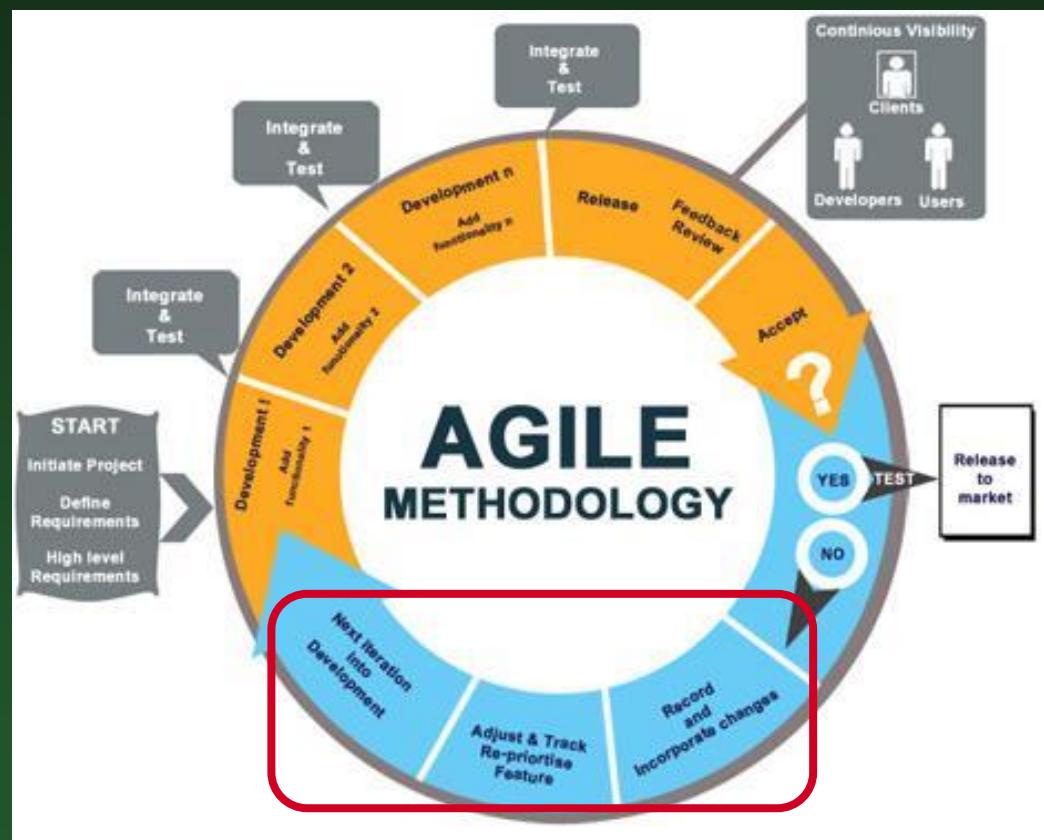
# Example-Metadata Viewer

- Execution
  - Addressed all new/updated requirements
- Review & Test
  - Acceptance!



# Example-Metadata Viewer

- Closing?



# How to start with agile (Start small build up)

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- Pick a small project
- Get key player(s) on board
- Show Repeated Success before you move on to larger projects
  - Sell the success story's
  - Sell the strengths of Agile (flexibility, stakeholders plugged in, etc.)
  - Learn and Improve the Process

# How to start with agile (Start small build up)

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- Extend to larger projects
- Have stakeholders/product owners advocate to other folks in the Org
- Overlap projects (Use sprint defined projects)
- Break out to other teams if necessary
- Build it! They will come!

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Questions????

Comments????

Feedback????