# ALIPRO

## Merging Waterfall & Agile Methodologies

2019 SIUE Project Management Symposium

November 22, 2019

SOUTHERN ILLINOIS UNIVERSITY EDWARDSVILLE
SCHOOL OF BUSINESS

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As Director of Implementation Services & Solutions, William Hinshaw specializes in establishing Portfolio, Program & Project Management Processes, Agile Transformations, Agile Deployments and Optimization, Change Management, Risk Management and Training.

Mr. Hinshaw holds an BS in Computer Science and is a certified Project Management Professional and SAFe Scrum Master with over 25 years' experience.

# AGENDA

1. Session Purpose & Ground Rules
2. Conceptual Commonalities between Methodologies
    a) Portfolio Layer
    b) Program Layer
    c) Execution Layer
3. Misconceptions around each Methodology
4. Achieving Success by merging each Methodology

# Session Purpose

- To illustrate how understanding, and leveraging, the similarities within each methodology can improve project success within any organization.
- To build recognition that “Methodology” alone does not define success.
- Hybrid solutions are a valid option to achieving success.

# Session Ground Rules

1. Place electronic devices on silent
2. Ask questions at any time!
   - Introduce yourself (name / role / organization)
3. Remain open to the ideas of others

# Conceptual Commonalities - Portfolio

- Project portfolio management is defined as the "centralized management of one or more portfolios that enable executive management to meet organizational goals and objectives through efficient decision making on portfolios, projects, programs and operations."

- The Portfolio Level contains the principles, practices, and roles needed to initiate and govern a set of development Value Streams. This is where strategy and investment funding are defined for value streams and their Solutions.

# Conceptual Commonalities - Portfolio

- **Scaled Agile**
  - Value Streams
  - Strategic Themes
  - Epics / Enablers
  - Backlog
  - Portfolio Canvas
  - KPI’s
- **Traditional Waterfall**
  - Strategic Roadmaps
  - Architectural Vision
  - Aligning Process Groups
  - Prioritizations
  - Portfolio Charters
  - Performance Indicators

# Conceptual Commonalities - Portfolio

Portfolio Level deliverables are about creating the initial boundaries, priority and identification of the work to be executed.

***Does the Methodology matter at this level?***

Or

Does the documentation at this level need to be methodology specific?

# Conceptual Commonalities – Program

- The program level is where development teams, stakeholders, and other resources are devoted to some important, ongoing system development mission.

- A program is a group of related projects managed in a coordinated manner to obtain benefits not available from managing them individually. Program management is the application of knowledge, skills, tools and techniques to meet program requirements.

# Conceptual Commonalities - Program

- **Scaled Agile**
  - Continuous Delivery Pipeline
  - Backlog Grooming
  - PI Objectives
  - Program Increments
- **Traditional Waterfall**
  - Release Management Process
  - Project Prioritizations
  - Project Charters / Scoping
  - Project Plans

# Conceptual Commonalities - Program

Program Level deliverables are about creating manageable units of work to be scheduled, executed, and delivered.

***Which Methodology works for your environment?***

- What is the Project Management Maturity level of the organization?
- Can you Release on Demand?
- What level of engagement do you have culturally within the organization?

# Conceptual Commonalities – Execution

- Project management is the application of knowledge, skills, tools, and techniques to project activities to meet the project requirements.

- The Team Level contains the roles, activities, events, and processes which Teams build and deliver value.

# Conceptual Commonalities - Execution

- **Scaled Agile**
  - Sprints
  - Backlog Grooming
  - Kanban Status
  - Velocity based calculations
- **Traditional Waterfall**
  - 2 week look ahead
  - Rolling Wave Planning
  - Start / Finish Focus
  - Durational based calculations

# Conceptual Commonalities - Execution

Execution Level deliverables are a direct reflection of the teams ability to produce in a predictable, timely and quality based manner.

***Which Methodology works for your Team?***

1. Is your team's work predictable?
2. Can the defined work pass the ***INVEST*** test?
3. What is the culture of the team doing the work?

# Common Misconceptions - Traditional Waterfall

- "Too rigid to handle the flexibility of my unknowns"
- "Project plans are too large and cumbersome to understand"
- "I can't plan that far out"
- "I have to know everything before I can plan the work"
- "Too much documentation"
- "Too many processes"

**Are these really the fault of the Methodology?**

# Common Misconceptions - Agile

- "Just throw it a sprint and it'll get done"
- "No visibility to when something is going to be finished"
- "I don't have the ability to dedicate resources"
- The Manifesto states "over" not NO!
  - Progress over Process
  - Working Software over documentation
- Teams hourly Capacity = Team Story Point Velocity

**Are these really the fault of the Methodology?**

So which Methodology works best for you?

Why are you only using ONE Methodology?

# Introduction to AGIFALL

# Introduction to AGIFALL

- AGIFALL is a common sense approach to Project Management designed to leverage the best of both Methodologies without sacrificing the integrity of either.
  - Chartering Value Streams
  - Scoping Capabilities / Features / Epics / Enablers
  - Utilizing Kanban status to update MS Project plans
  - Leverage MS Project plans to groom backlogs / schedule sprints / PI Planning
  - Reporting impacts of Velocity against target completion dates
  - Resource loading sprints with non-dedicated teams

# Introduction to AGIFALL

- AGIFALL allows organizations to focus their Project Management based on the 3 key pillars, rather than a single Methodology.

# Introduction to AGIFALL

| Task Name | Start | Finish |
|---|---|---|
| Sprint Name: No Value | Fri 8/23/19 12:( | Wed 9/2/20 12 |
| No Value | Tue 9/1/20 1:0( | Wed 9/2/20 12 |
| CES | Fri 8/23/19 12:( | Tue 10/22/19 1 |
| LEPD | Fri 8/23/19 12:( | Wed 11/6/19 5 |
| Sprint Name: OM Sprint 18 | Thu 8/22/19 1:( | Fri 9/13/19 5:0 |
| CES | Thu 8/22/19 1:( | Fri 8/23/19 12:( |
| Create Hardware / Software Requirements documentation & Site topology Diagram for | Thu 8/22/19 1:00 | Fri 8/23/19 12:00 |
| No Value | Fri 9/6/19 8:00 | Tue 9/10/19 5:( |
| LEPD | Thu 8/22/19 1:( | Fri 9/6/19 5:00 |
| Create Hardware / Software Requirements documentation & Site topology Diagram for | Thu 8/22/19 1:00 | Fri 8/23/19 12:00 |
| Verify that Dealer has connected router to Kinetics platform for Alban HQ PV | Mon 8/26/19 8:0 | Mon 8/26/19 5:0 |
| Setup initial TW Users for Alban HQ PV | Mon 8/26/19 8:0 | Mon 8/26/19 5:0 |
| Request LAN Accounts for Alban HQ PV | Mon 8/26/19 8:0 | Fri 8/30/19 5:00 I |
| Claim and setup network config on Router at Dealership for Alban HQ PV | Tue 8/27/19 8:00 | Tue 8/27/19 5:00 |
| Create PI Tag standardization for Alban HQ PV | Tue 8/27/19 8:00 | Tue 8/27/19 5:00 |
| Install Configuration file on Router at Dealership for Alban HQ PV | Wed 8/28/19 8:0 | Wed 8/28/19 5:0 |
| Complete Asset Framework w/o calculations for Alban HQ PV | Wed 8/28/19 8:0 | Wed 8/28/19 5:0 |
| Team and Dealer meet to review installation plan for Alban HQ PV | Thu 8/29/19 8:00 | Thu 8/29/19 5:00 |
| Build PIVIsion screens w/o calculations for Alban HQ PV | Thu 8/29/19 8:00 | Thu 8/29/19 5:00 |
| Notify Web UI of new site for Alban HQ PV | Fri 8/30/19 8:00 , | Fri 8/30/19 5:00 I |
| Request Groups in Active Directory and Add LAN accounts to groups for Alban HQ PV | Mon 9/2/19 8:00 | Fri 9/6/19 5:00 PI |
| Update TW XML file for new site for Alban HQ PV | Mon 9/2/19 8:00 | Mon 9/2/19 5:00 |
| No Value | Thu 9/12/19 8:( | Fri 9/13/19 5:0 |
| Sprint Name: OM Sprint 19 | Mon 9/9/19 8:0 | Tue 9/24/19 5:( |
| No Value | Mon 9/9/19 5:0 | Fri 9/20/19 5:0 |
| LEPD | Mon 9/9/19 8:0 | Tue 9/10/19 5:( |



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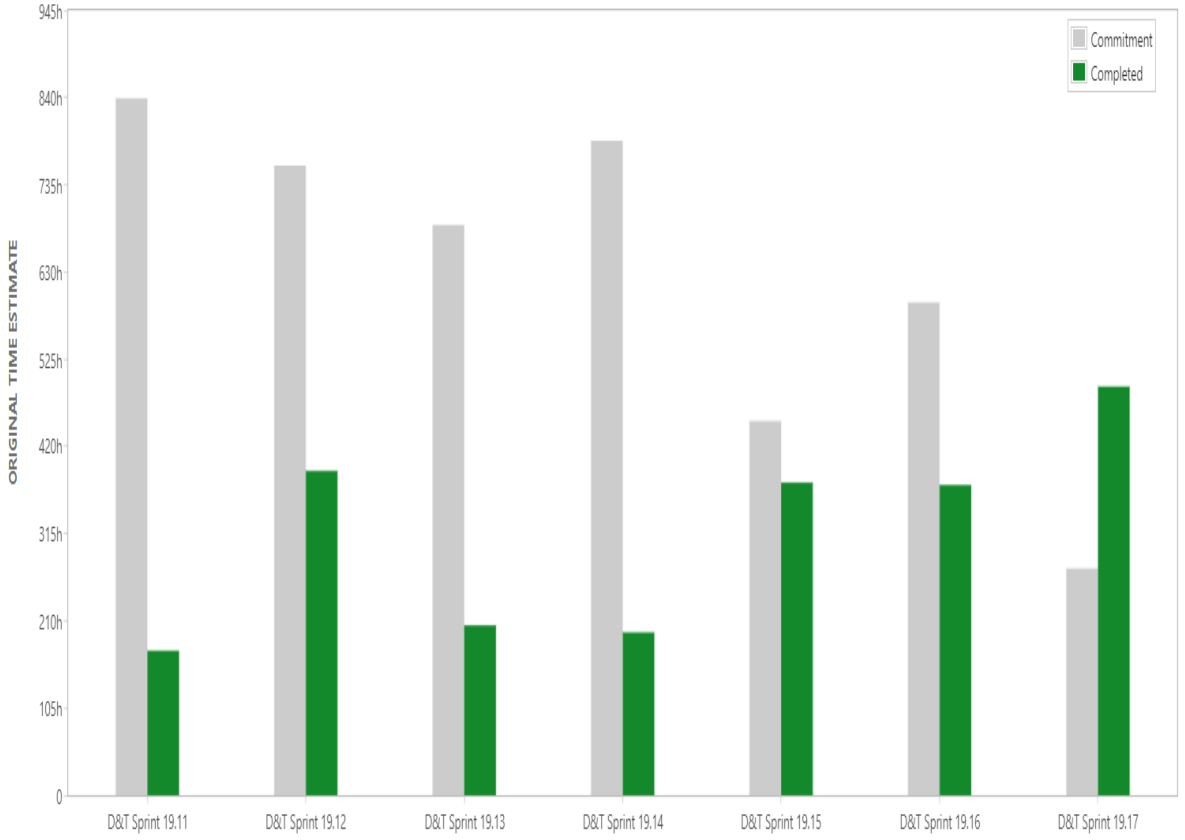


COMPLETED LAST 2 WEEKS

| | Indi | Task Name | Start | Actual Finish |
|---|---|---|---|---|
| | | **Project: Alban - HQ PV** | **Mon 7/8/19 12** | **Tue 8/20/19 5:00 PM** |
| | | **Tollgate: Tollgate 3** | **Mon 7/8/19 12** | **Tue 8/13/19 5:00 PM** |
| 1 | ✓ | Target Commissioning Date for Alban HQ PV | Mon 7/8/19 12:0 | Tue 8/13/19 5:00 PM |
| | | **Tollgate: Tollgate 4** | **Wed 8/14/19 1** | **Tue 8/20/19 5:00 PM** |
| 44 | ✓ | Verify Dealer Ordered all required Hardware for Alban HQ PV | Wed 8/14/19 1:0 | Wed 8/14/19 5:00 PM |
| 45 | ✓ | Verify Dealer received all required hardware for Alban HQ PV | Thu 8/15/19 8:00 | Tue 8/20/19 5:00 PM |
| 50 | ✓ | Inform project manager of Site readiness for Alban HQ PV | Wed 8/14/19 5:0 | Fri 8/16/19 5:00 PM |
| | | **Project: Edina - St. Asaph** | **Thu 8/22/19 5:** | **Thu 8/22/19 5:00 PM** |
| | | **Tollgate: No Value** | **Thu 8/22/19 5:** | **Thu 8/22/19 5:00 PM** |
| 69 | ✓ | Validate User Interface working | Thu 8/22/19 5:00 | Thu 8/22/19 5:00 PM |
| | | **Project: Holt - Cache Creek Casino** | **Thu 8/22/19 1:** | **Thu 8/22/19 1:00 PM** |
| | | **Tollgate: Tollgate 1** | **Thu 8/22/19 1:** | **Thu 8/22/19 1:00 PM** |
| 2 | ✓ | Project Start for Holt - Cache Creek Casino | Thu 8/22/19 1:00 | Thu 8/22/19 1:00 PM |
| 4 | ✓ | Tollgate 1: Pre-Kickoff (Sales) Completed for Holt - Cache Creek Casino | Thu 8/22/19 1:00 PM | Thu 8/22/19 1:00 PM |
| | | **Project: Hydroponic** | **Tue 7/30/19 8:** | **Thu 10/24/19 10:00 AM** |
| | | **Tollgate: No Value** | **Tue 7/30/19 8:** | **Wed 8/7/19 5:00 PM** |
| 21 | ✓ | SI completes installation once Hardware installed by Dealer | Tue 7/30/19 8:00 | Wed 8/7/19 5:00 PM |
| | | **Tollgate: Tollgate 5** | **Fri 8/2/19 8:00** | **Fri 8/9/19 12:00 PM** |
| 19 | ✓ | SI configures and tests the system | Fri 8/2/19 8:00 A | Fri 8/9/19 12:00 PM |
| | | **Tollgate: Tollgate 7** | **Wed 10/2/19 8** | **Thu 10/24/19 10:00 AM** |

# Introduction to AGIFALL

AGIFALL excels when:

- The work items inside an efforts fails the INVEST acronym
  - Is this story **I**ndependent?
  - Is this story **N**egotiable?
  - Is this story **V**aluable?
  - Is this story **E**stimable?
  - Is this story **S**ized appropriately?
  - Is this story **T**estable?
- At the Program level for Monitoring and Controlling projects using different methodologies.
- Working with non-dedicated or cross methodology oriented functional teams.
- Where end-to-end project plan execution extends beyond application development.
- When an executive office manages in a traditional manner

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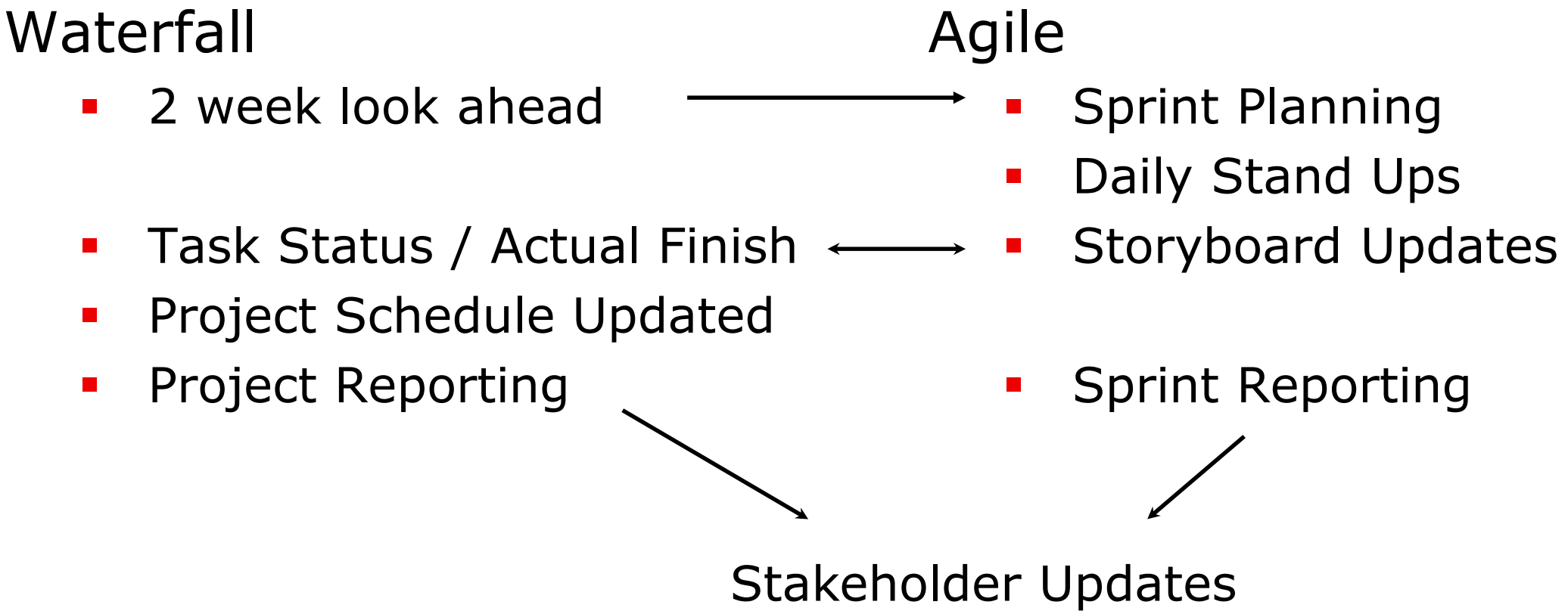

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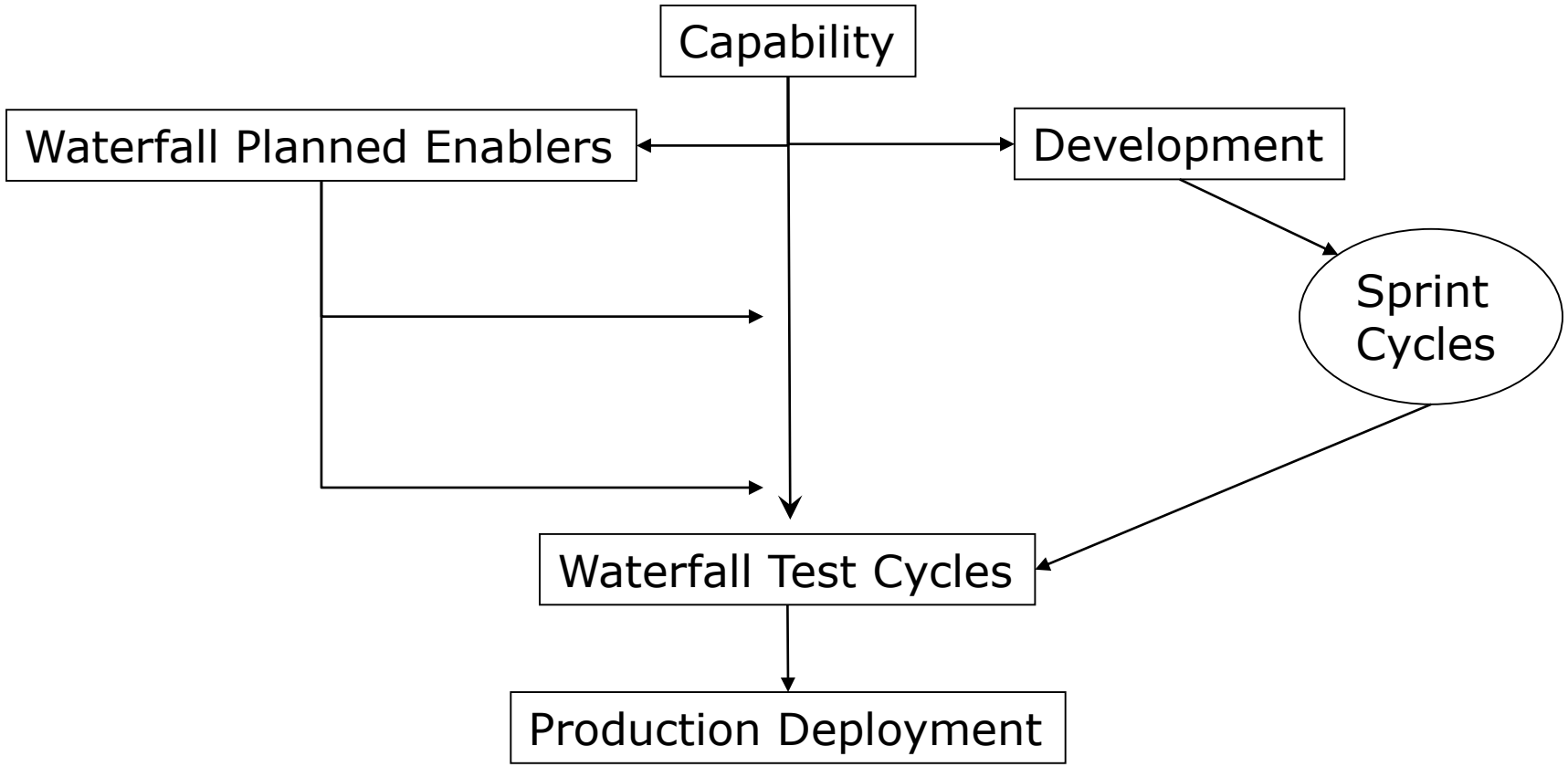

# Introduction to AGIFALL

## Utilizing Technology:

- "Bridging" software allows Agile software to be linked with MS Project
  - Azure DevOps Boards to MSP
  - JIRA to MSP (Ceptah)
  - Etc…

- Stakeholder reporting with Real-Time data
  - Burndown charts driving critical path
  - Variance reports calculated based on sprint burndown
  - Resource Allocations in MSP controlling sprint loading
  - Backlog reports that incorporate target dates using MSP

# Closing Comments

- PMBOK, Agile Manifesto, and SAFe are guidelines to be used to create a consistent Project Management approach to achieving success.
  - How you deploy, leverage, implement or establish them is always a decision to be made based on the 3 key pillars
  - There is no such thing as a “silver bullet”
  - The Project Management Maturity level of your organization will always control the ability to execute any Methodology.

- Think big, plan small, execute with control, deliver only quality.

# Thank You

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