

MSF 4.0 in 60-minutes



*Milen Petrov
Griffin Ltd.*

Agenda

- Motivation
- Where MSF fits in SDLC
- What's New in MSF v4.0
- MSF for Agile Software Development
- Extending VSTS Templates
- Q&A

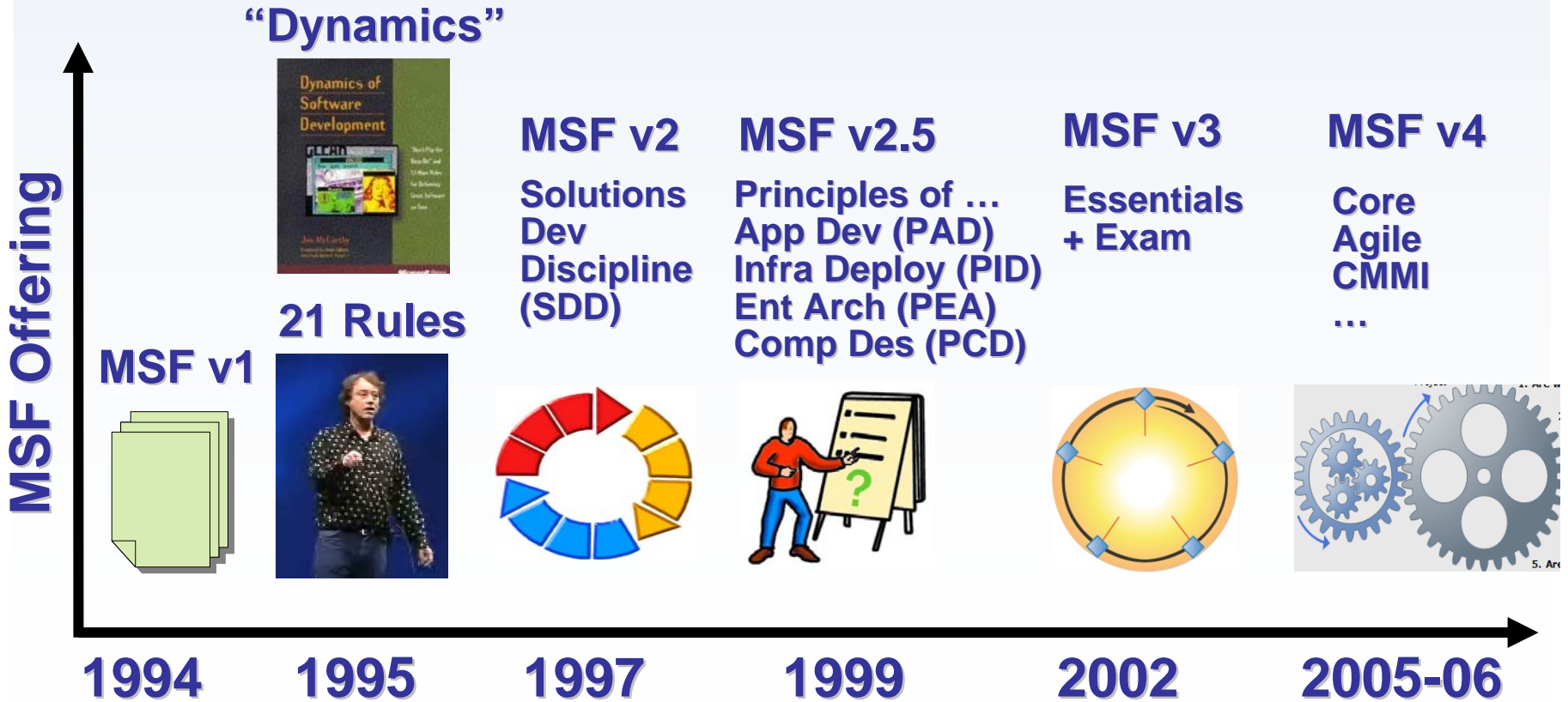
Goal: A quick fly-by of what's new... so that you can explore the details at a later time.

Agenda

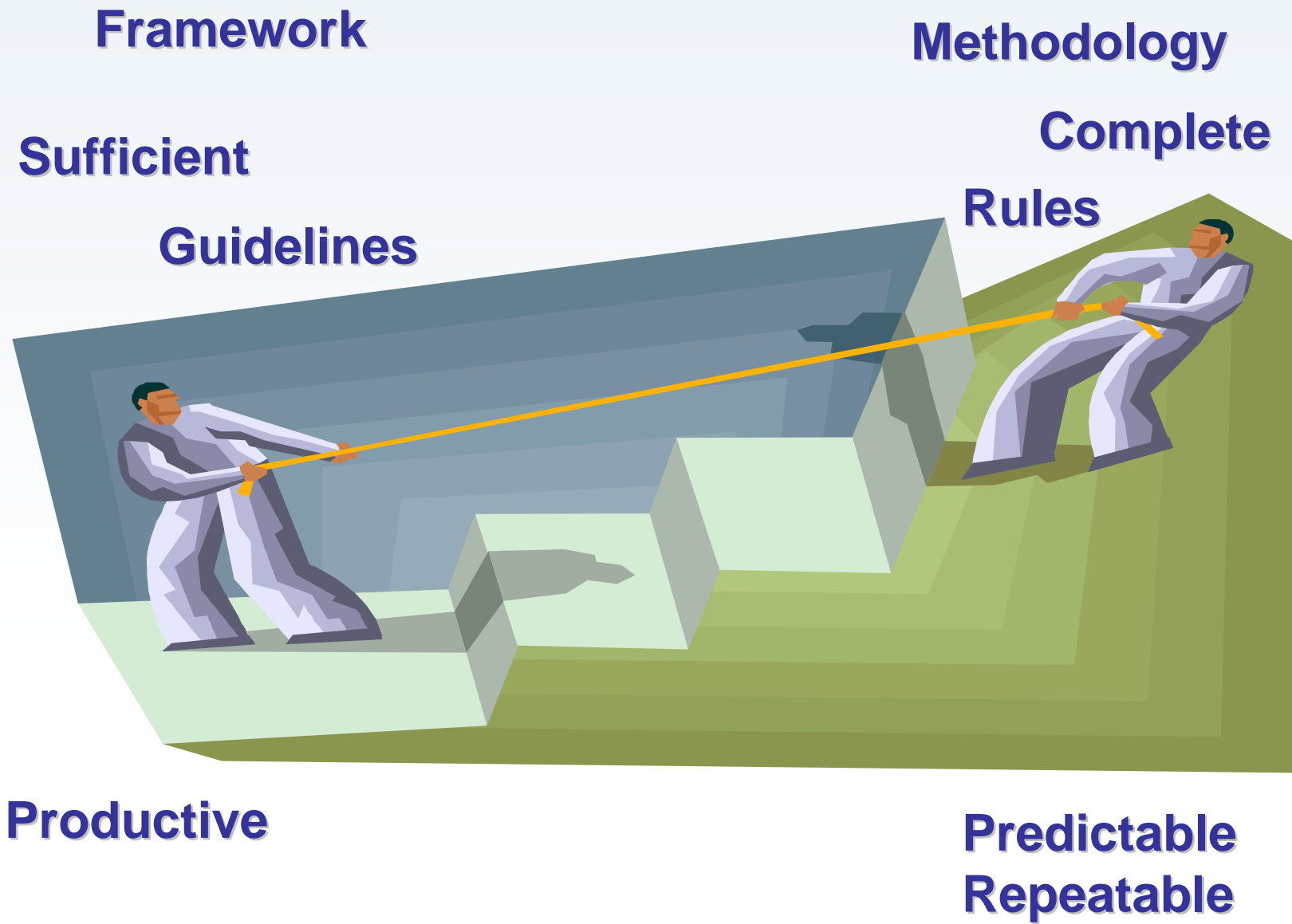
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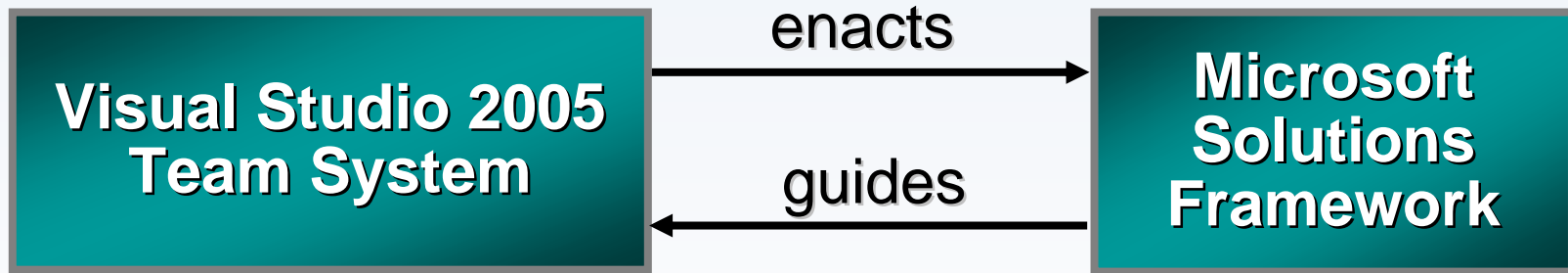
A Brief History



Why Can't Process Help Productivity?



Process & Tools Integration

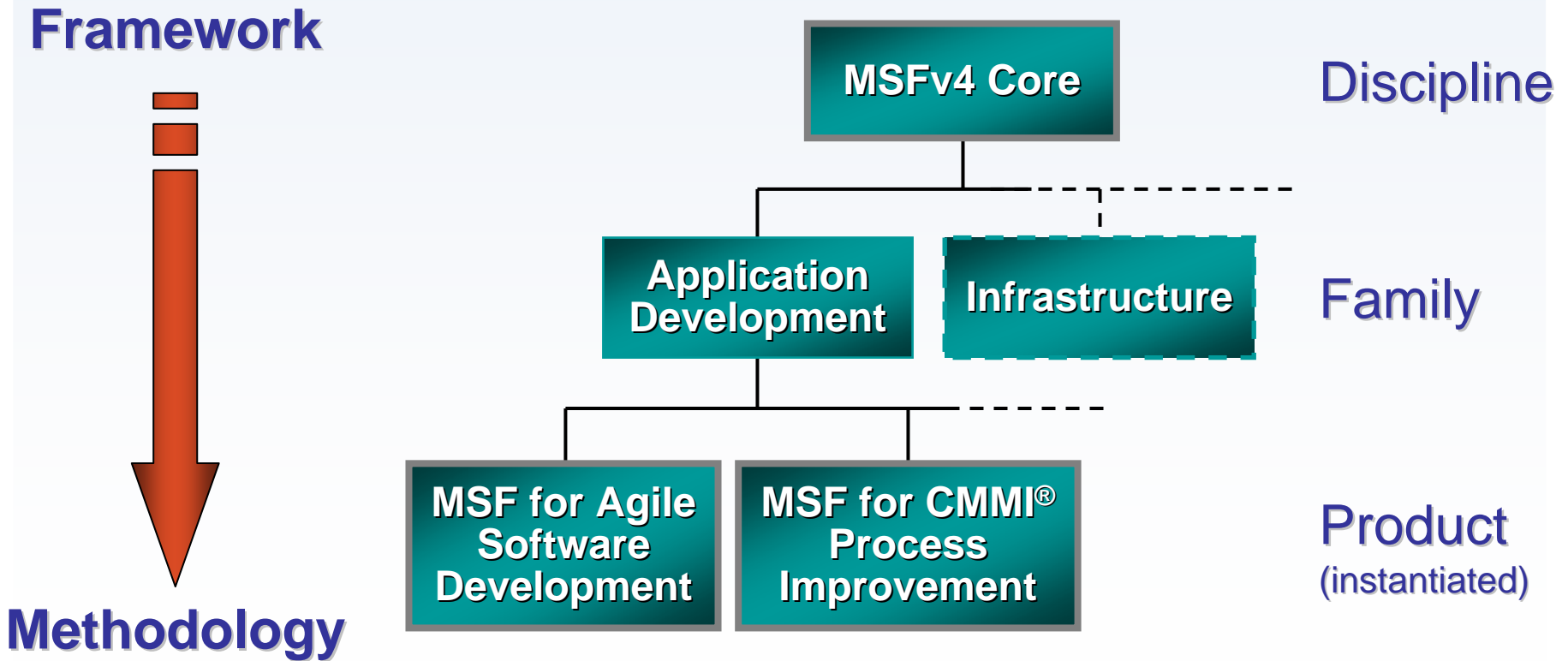


- How VSTS enables MSF?
 - Productivity tools & processes
 - Integrated tools & processes
 - Extensible tools & processes

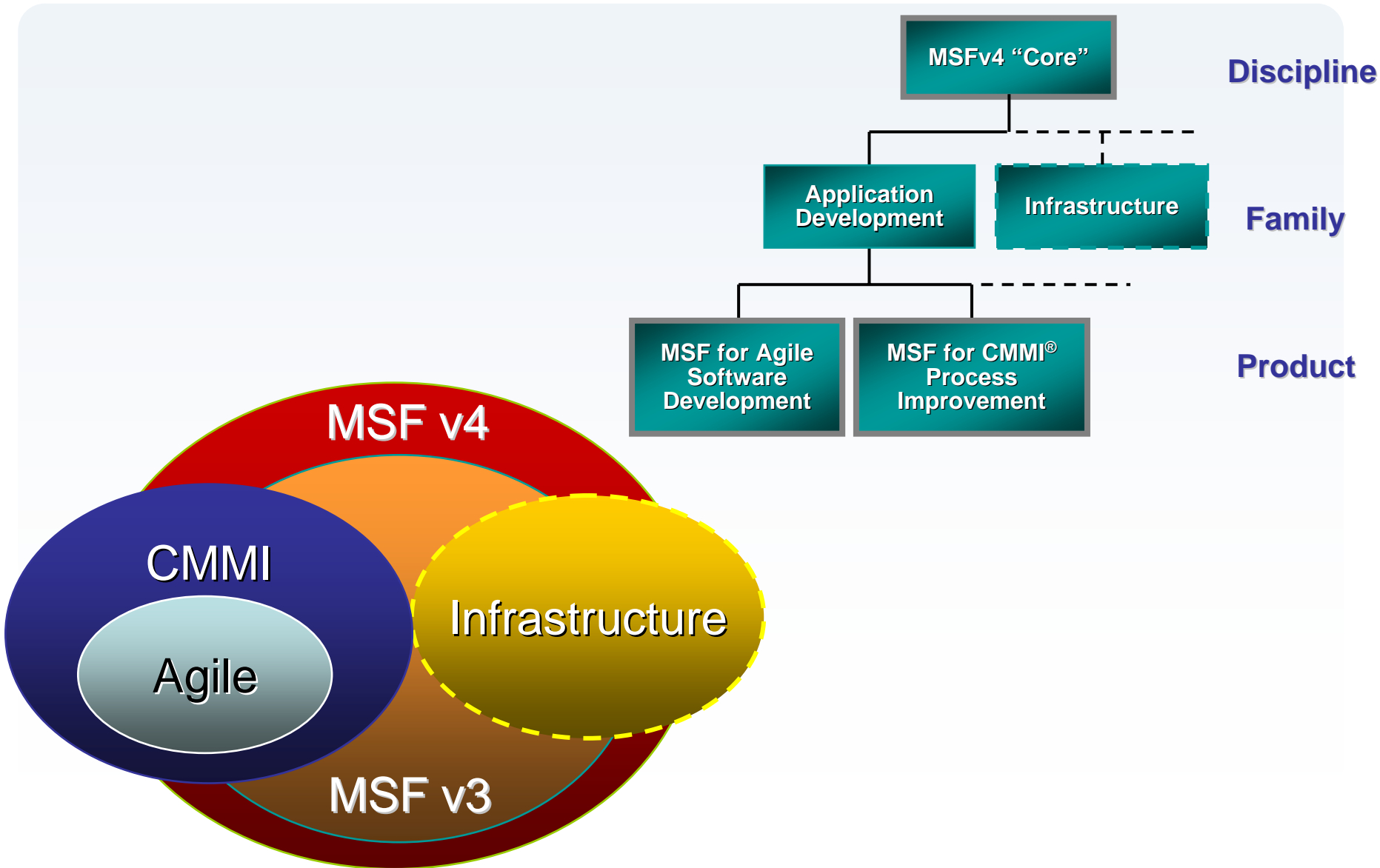
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MSFv4 Family Tree

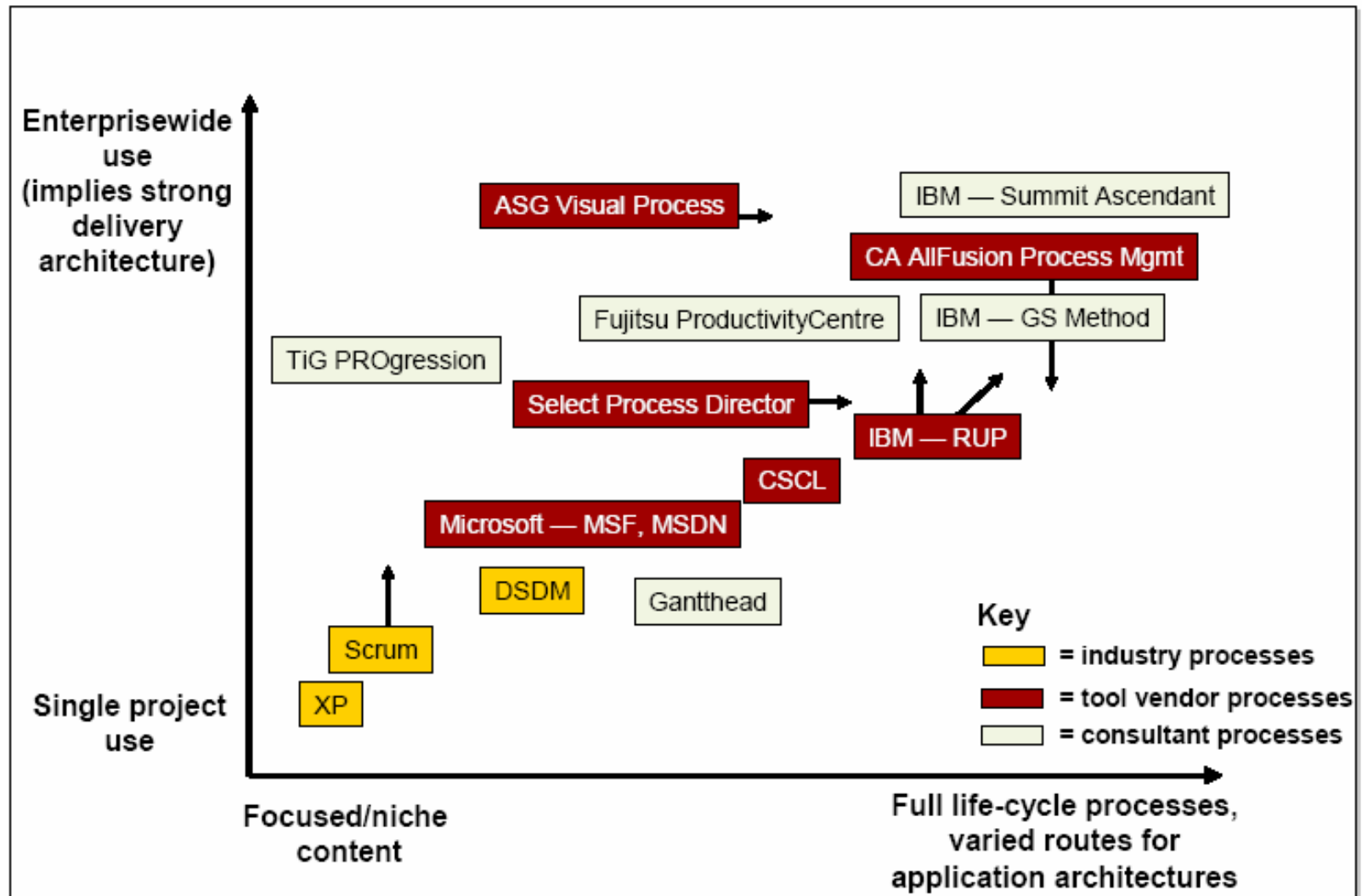


Content Relationship



Continuum of Methodologies

The Methodology Market



Source: Giga Research, a wholly owned subsidiary of Forrester Research, Inc.

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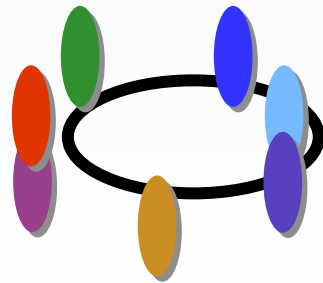
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What is MSFv4?

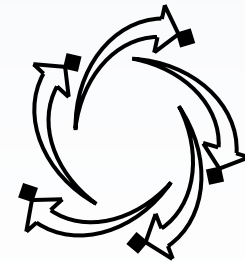
A set of foundational principles, mindsets and proven practices with an adaptable framework for successfully delivering solutions faster, requiring fewer people, and involving less risk, while enabling higher quality results.

Models

Team
Model

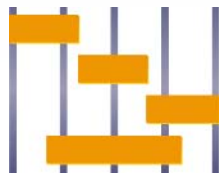


Governance
Model



Disciplines

Project
Management
Discipline



Risk
Management
Discipline

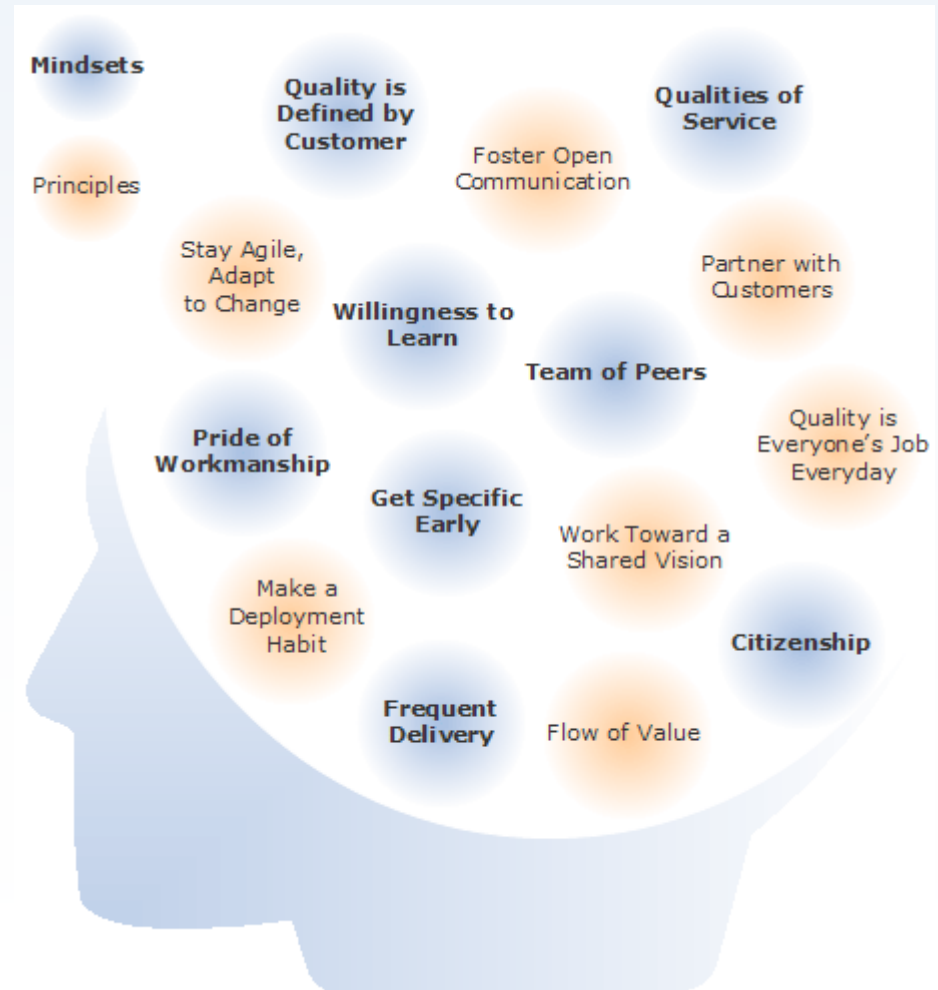


Readiness
Management
Discipline



Fundamentals

- Principles
- Mindsets
 - Key Concepts
→ Mindsets
- Proven Practices



Planning

- Risk Analysis
- Scheduling Process
- Stakeholder Analysis
- Readiness Management
- Requirements Prioritization
 - Simple
 - Kano Analysis

Team Model

- **Advocacy**

 - Groupings**

 - Was: Role Clusters

- **New: *Architecture***

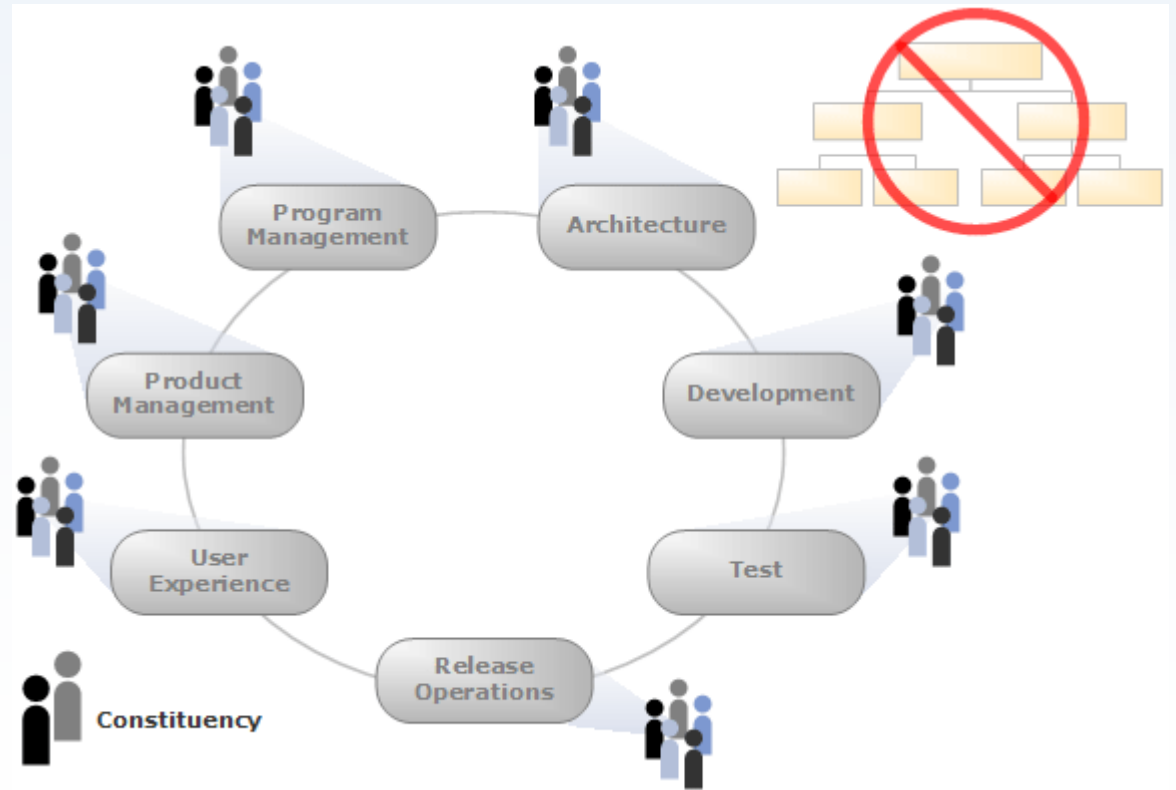
 - Responsibilities pulled from Proj Mgmt and Dev

- **Release**

 - Operations**

 - Was: Release Mgmt

- More functional areas in each advocacy group



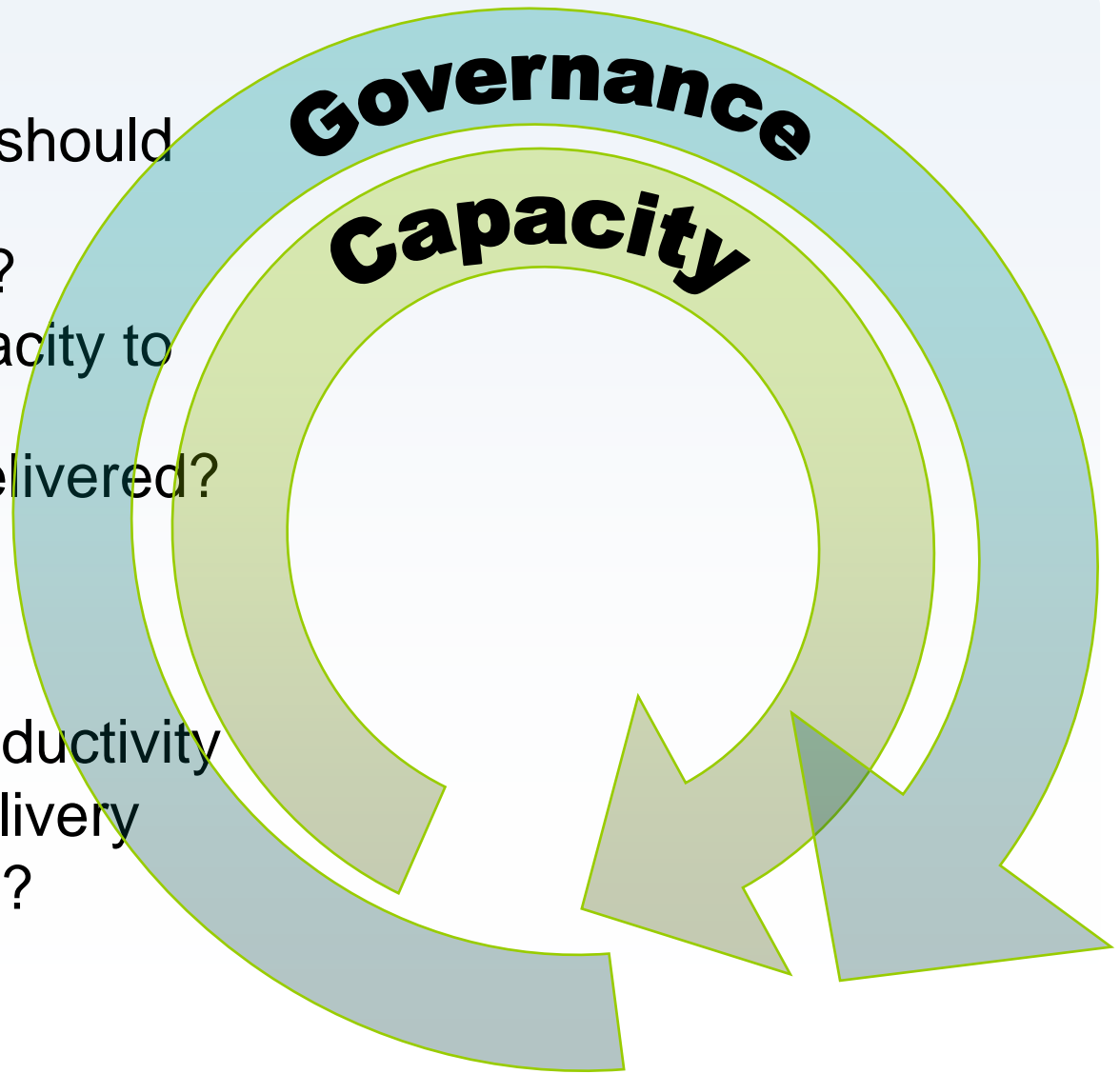
Governance Model

■ Governance

- Which projects should we do?
- Which features?
- How much capacity to allocate?
- How is value delivered?

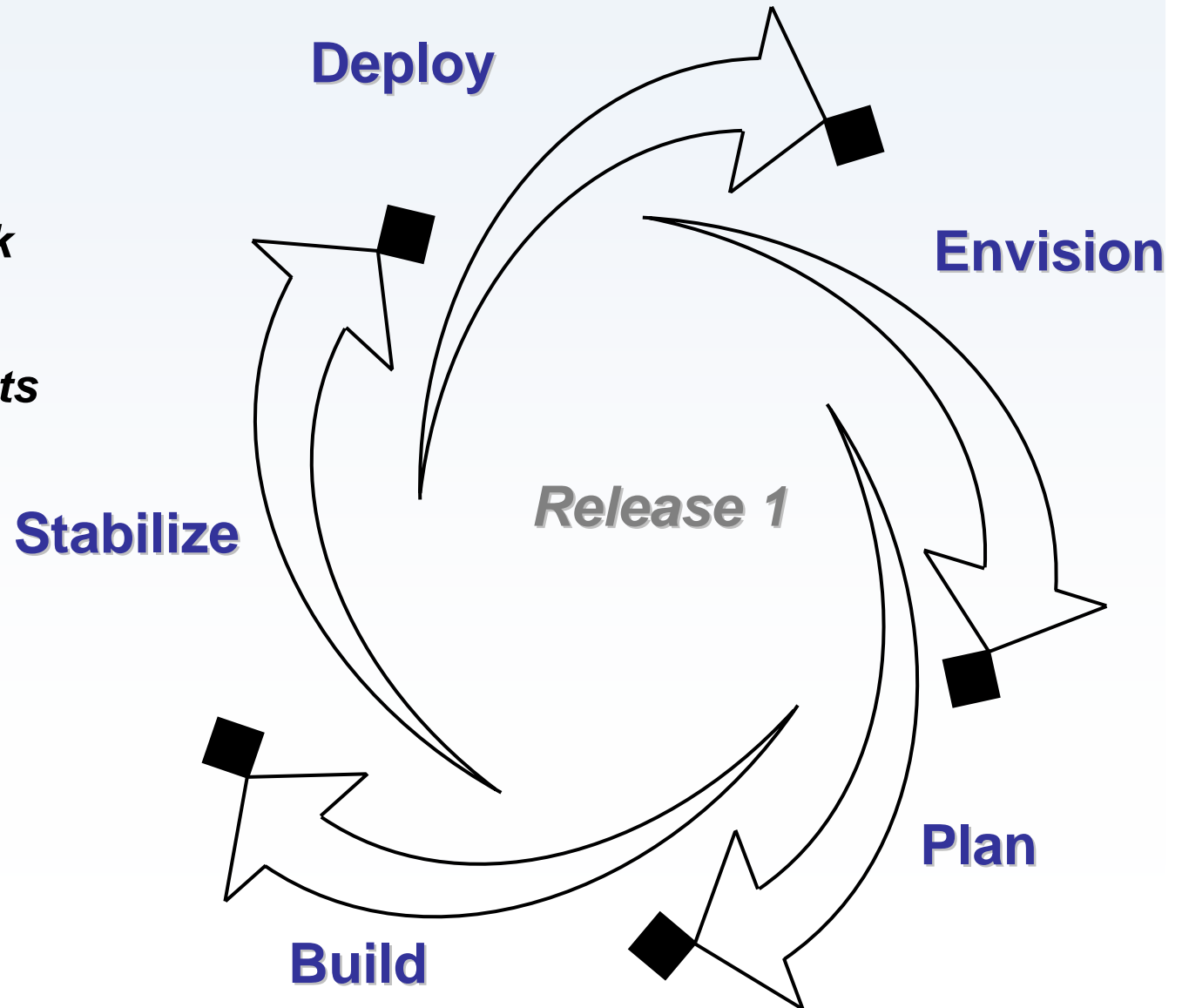
■ Capacity

- Enactment
- Measurable productivity
- Manageable delivery
- How to improve?



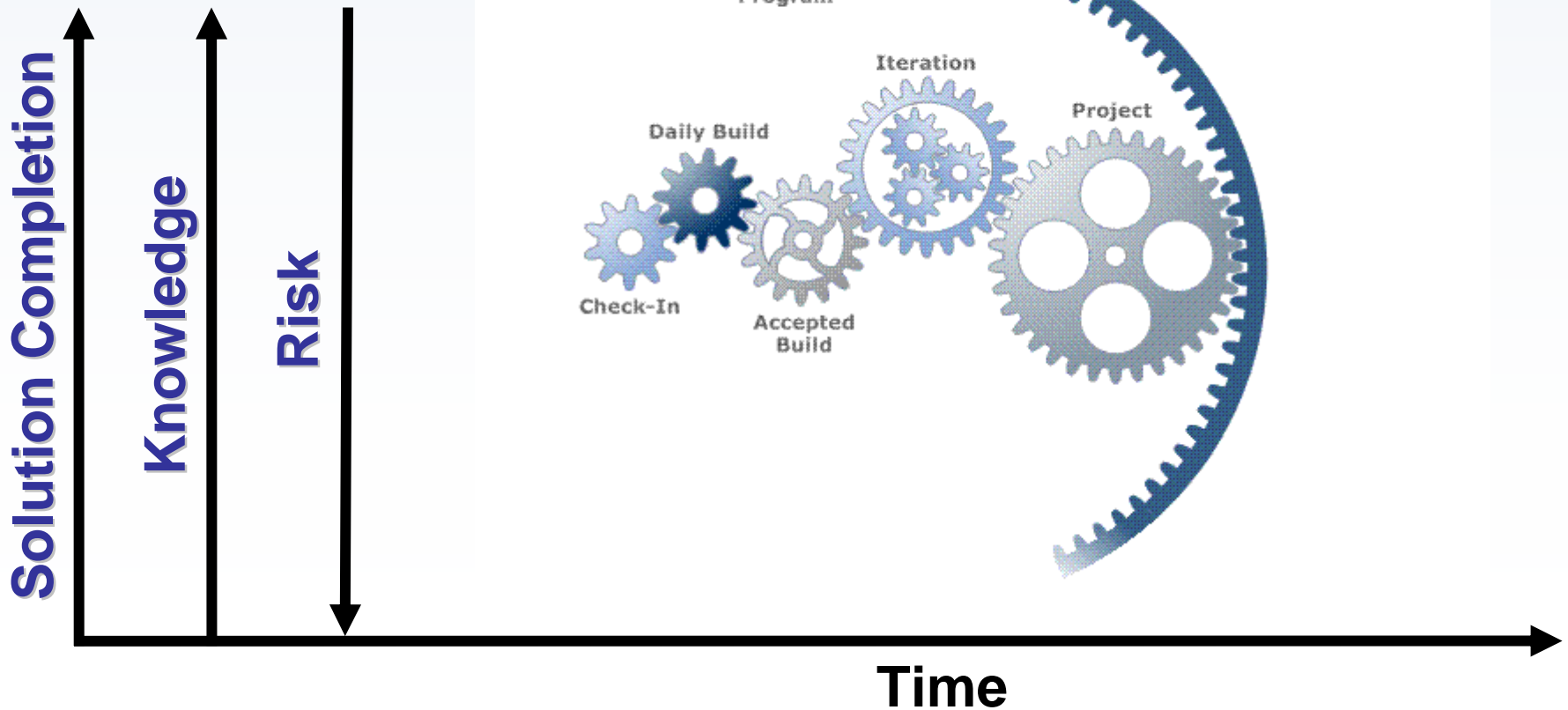
Process Model

- Phases
→ *Tracks*
- Develop Track
→ *Build Track*
- Milestones
→ *Checkpoints*



Iterative Approach

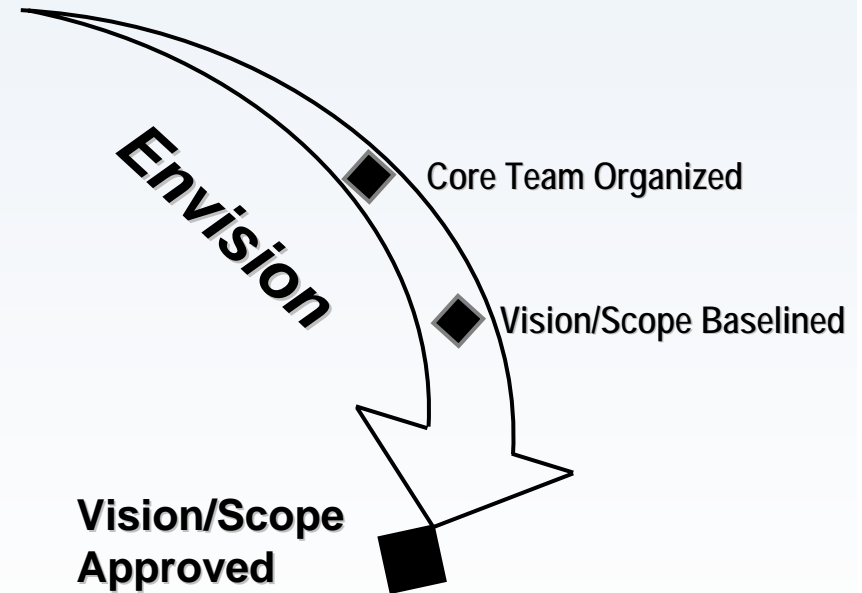
Minimize risks by breaking large projects into multiple versions



MSF Envision Track

Deliverables

- Vision/scope document
- Project structure document
- Initial risk assessment document



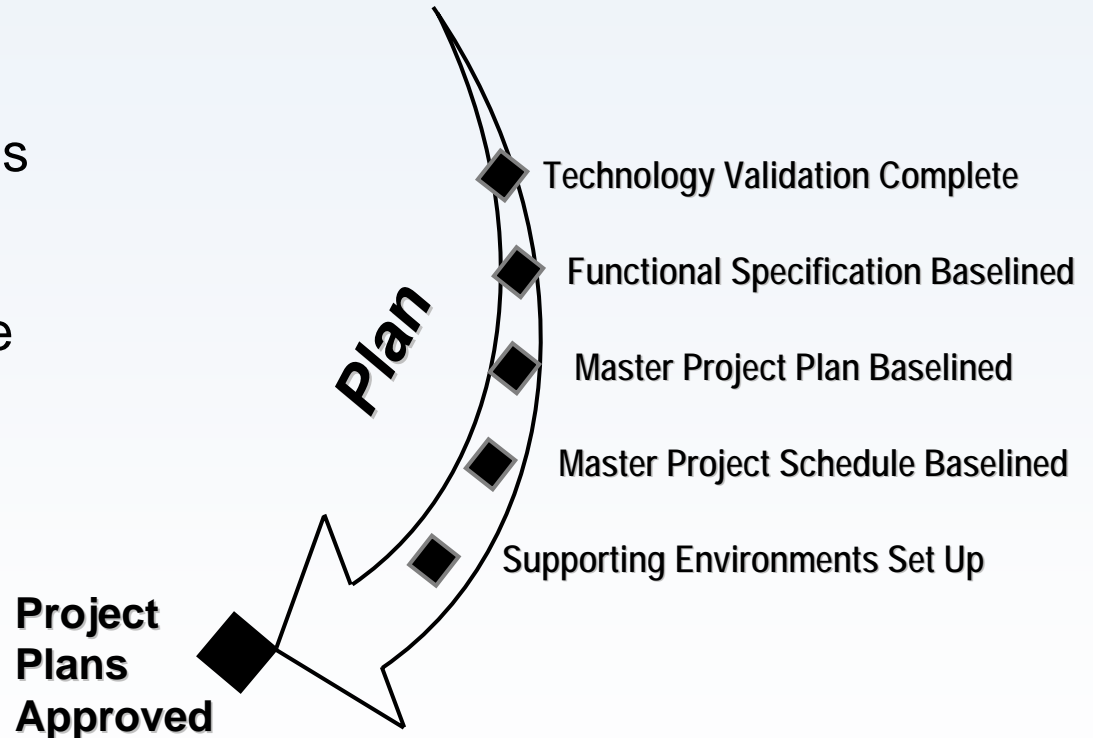
Goals

- Develop a clear understanding of what is needed within context of project constraints
- Assemble necessary team to envisage solution with options and approaches that best meet those needs while optimally satisfying those constraints

MSF Plan Track

Deliverables

- Functional specifications
- Master project plan
- Master project schedule



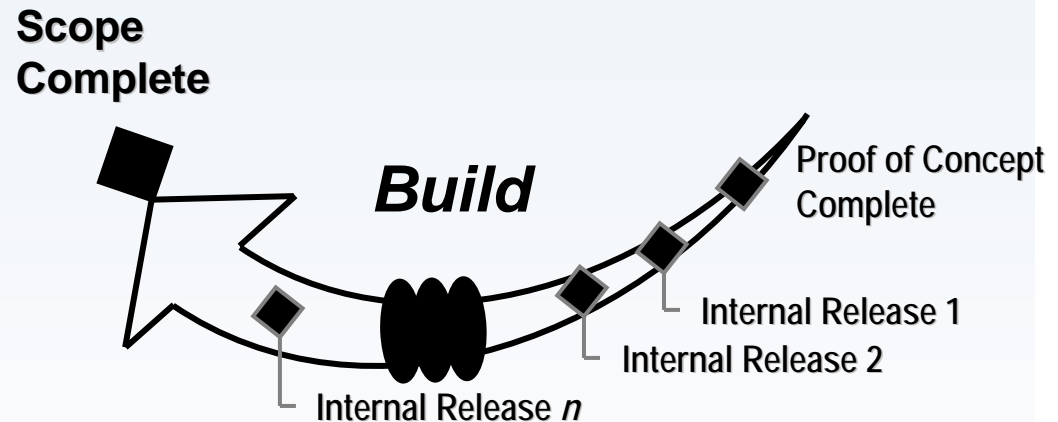
Goal

- Evolve conceptual solution into tangible designs and plans so it can be build in the developing track
 - Find out as much information as possible, as early as possible
 - Know when you have enough information to move forward

MSF Build Track

Deliverables

- Completed Solution
- Training materials
- Documentation
- Marketing materials
- Updated master plan, schedule and risk document



Goal

- Build various aspects of the solution in accordance with plan track deliverables (e.g., designs, plans, requirements)
 - Develop solution features and components, complete deliverables and other elements of the solution
 - Test the various aspects of the solution to assess the state of quality of the solution

Testing the Solution

■ Goal

- Expose issues, uncover design flaws and identify unexpected behavior

■ Role of testing:

- *Proactive*: Leads build effort (e.g., test-driven development)
- *Supportive*: Follows build effort (e.g., design a little, build a little, test a little)

■ Testing is not just for testers

- Can be performed by anyone helping improve the completeness and/or quality of work item deliverables

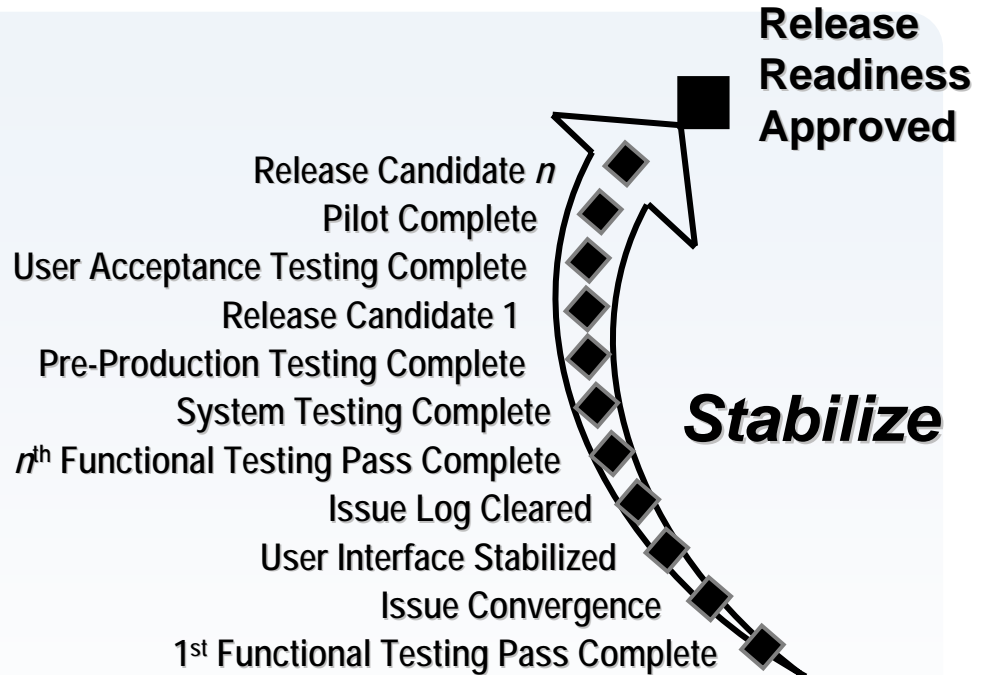
MSF Stabilize Track

Deliverables

- Pilot review
- Release-ready versions of solution and accompanying collateral
- Testing and bug reports
- Project documents

Goals

- Improve solution quality to meet release criteria for deployment to production
- Validate solution meets stakeholder needs and expectations
- Validate solution usability from a user perspective
- Maximize success and minimize risks associated with solution deployment and operations in its target environment(s)



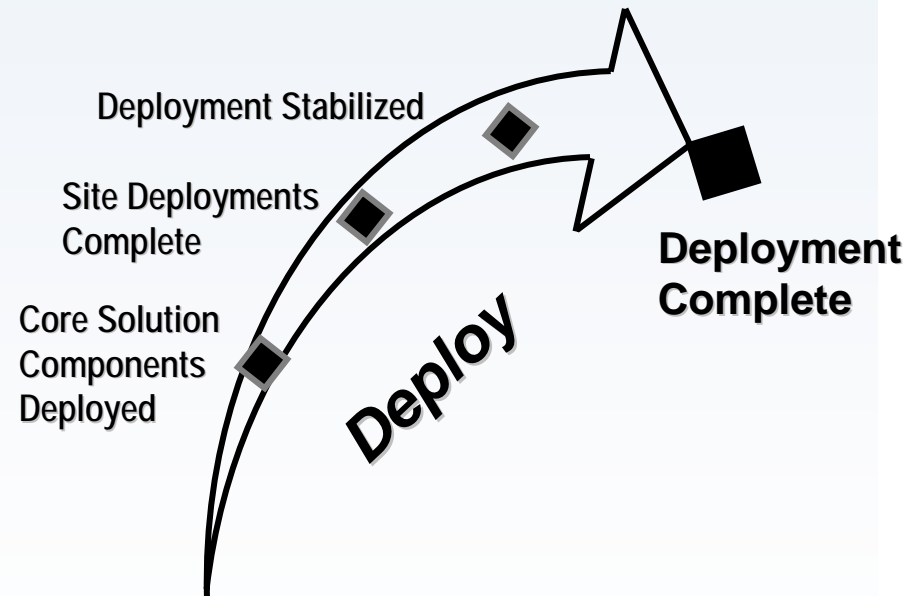
MSF Deploy Track

Deliverables

- Operations and support information systems
- Revised processes and procedures
- Repository of all solution collateral

Goals

- Place solution into production at designated environment(s)
- Facilitate smooth transfer of solution from project team to operations team as soon as possible

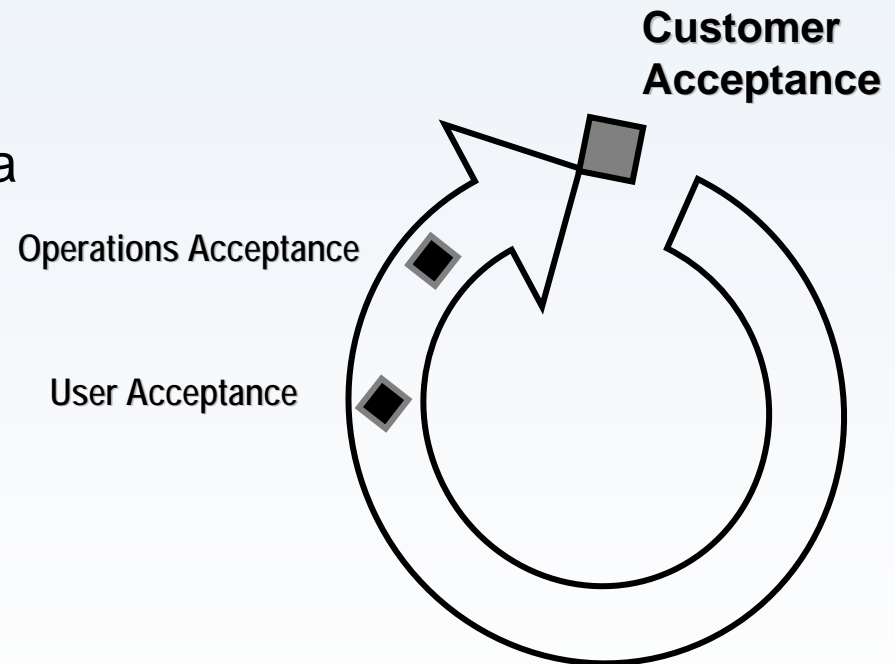


Deliverables

- Status reports
- Customer/user satisfaction data
- Final versions of all project documents
- Project closeout report

Goals

- Secure approval from:
 - Users that the solution meets their needs and is sufficiently usable
 - Operations that the solution is ready to deploy
 - Customer that the project is complete
- Optimize and continuously improve team performance and throughput, solution quality and process improvement



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Agile Manifesto

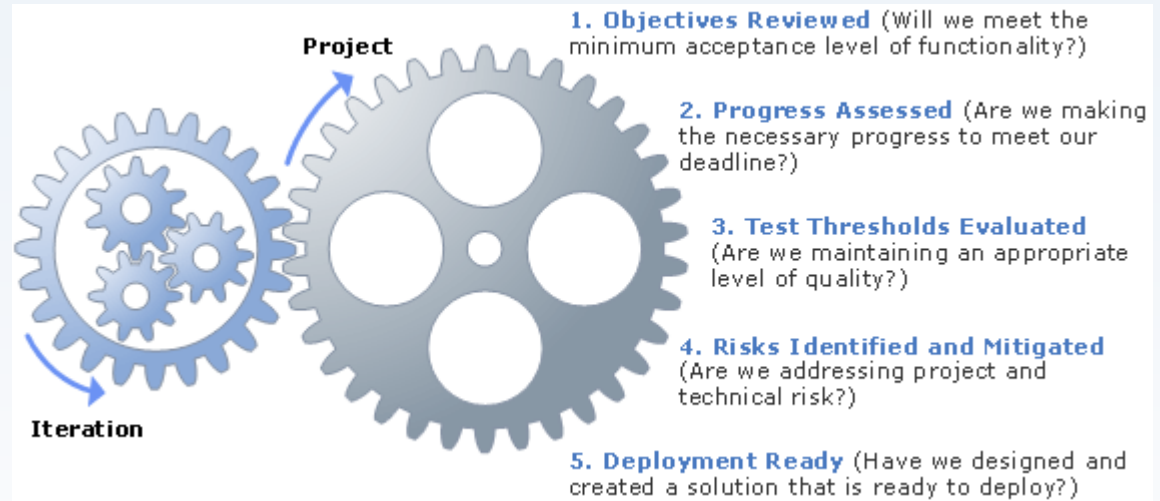
- *Individuals and interactions* over processes and tools
- *Working software* over comprehensive documentation
- *Customer collaboration* over contract negotiation
- *Responding to change* over following a plan

Time-Boxed Iteration

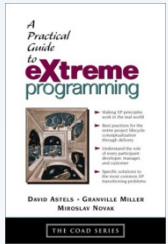
- **Time Box** = Time limit in which to complete an iteration

- **How**

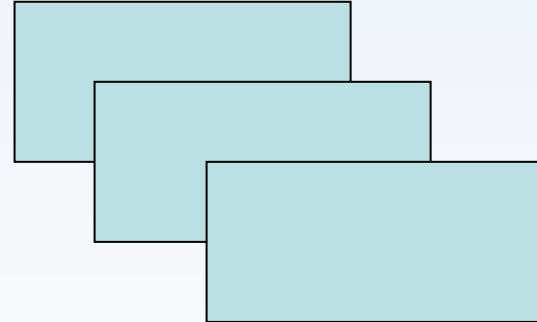
- Reduce functionality
- Reschedule features



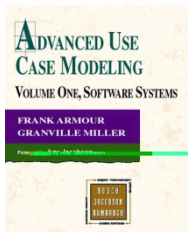
Personas



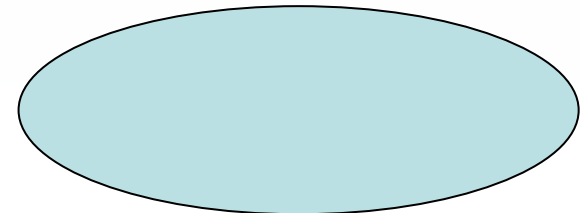
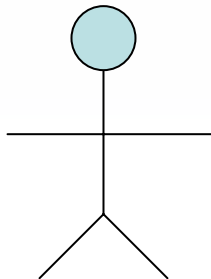
On-site
Customer



Persona



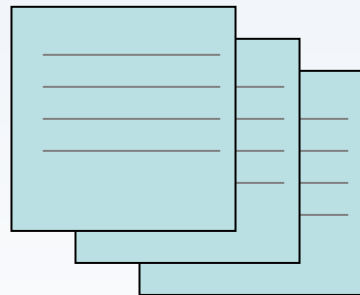
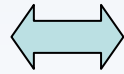
Actor



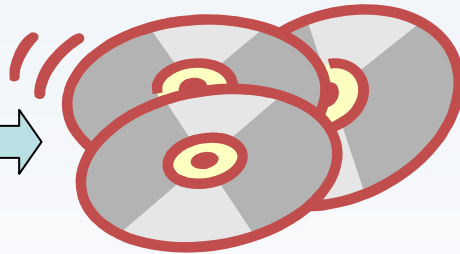
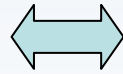
Scenarios



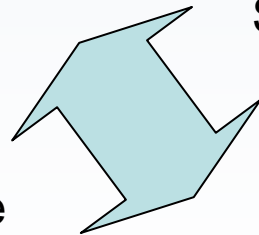
Personas



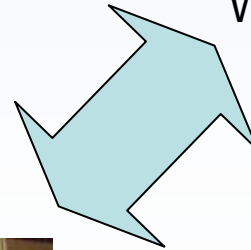
Scenarios



Working Software



Refine



Review






Real Customers

The Agile Pattern

Scenario 1
Scenario 2
Scenario 3
Scenario 4

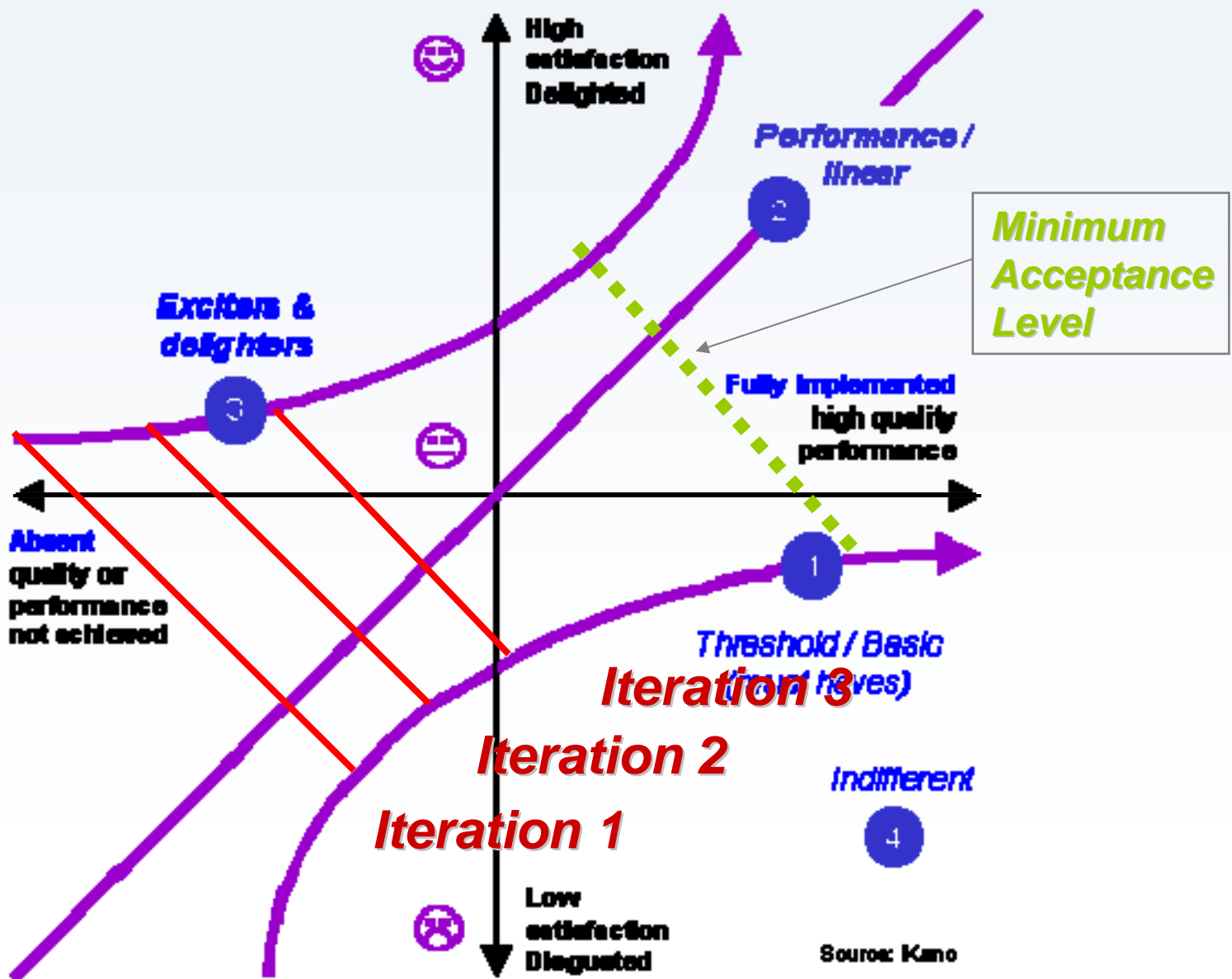
Scenario List



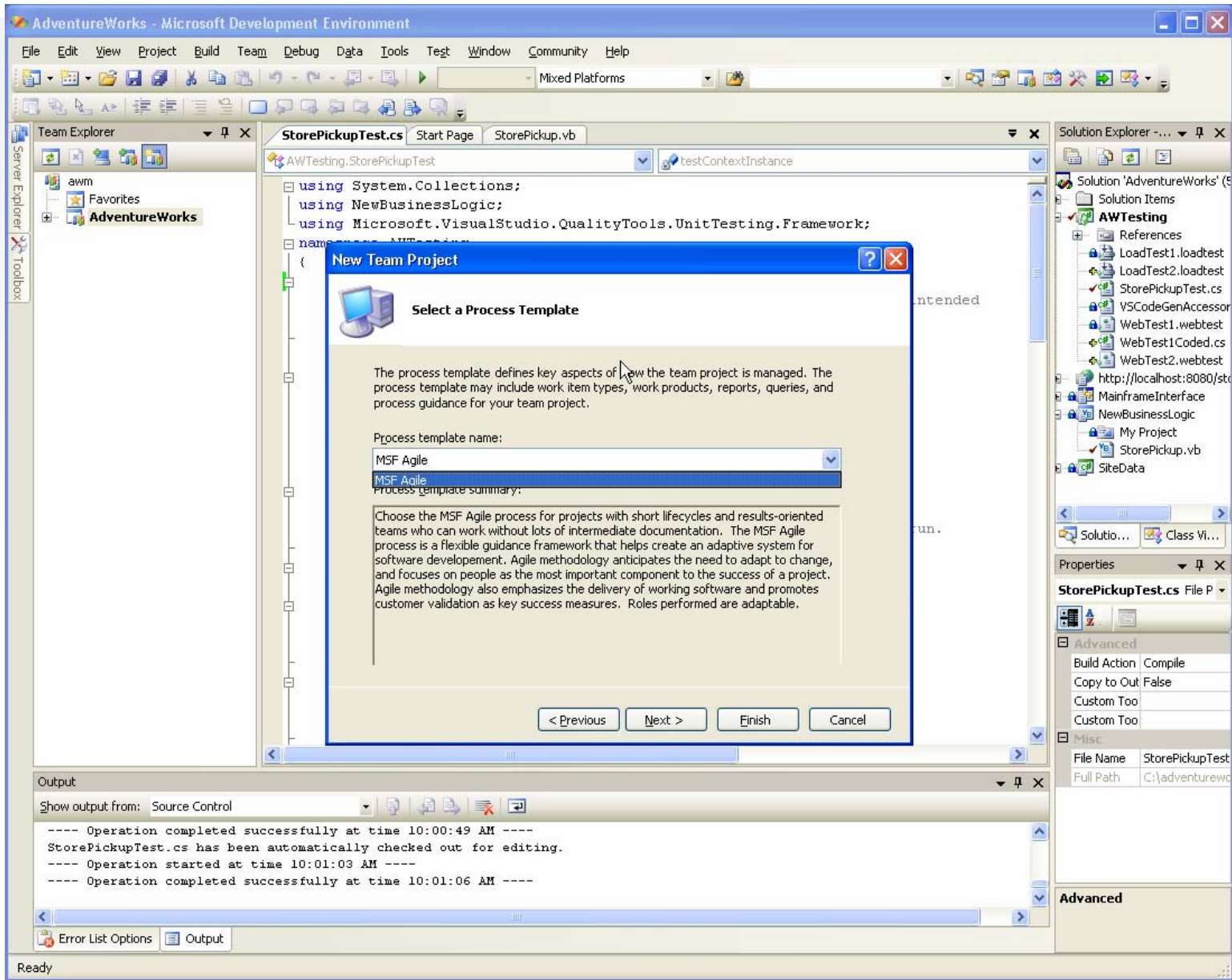
Iteration 1	
Scenario 1	
Scenario 2	
Scenario 3	

Iteration Plan

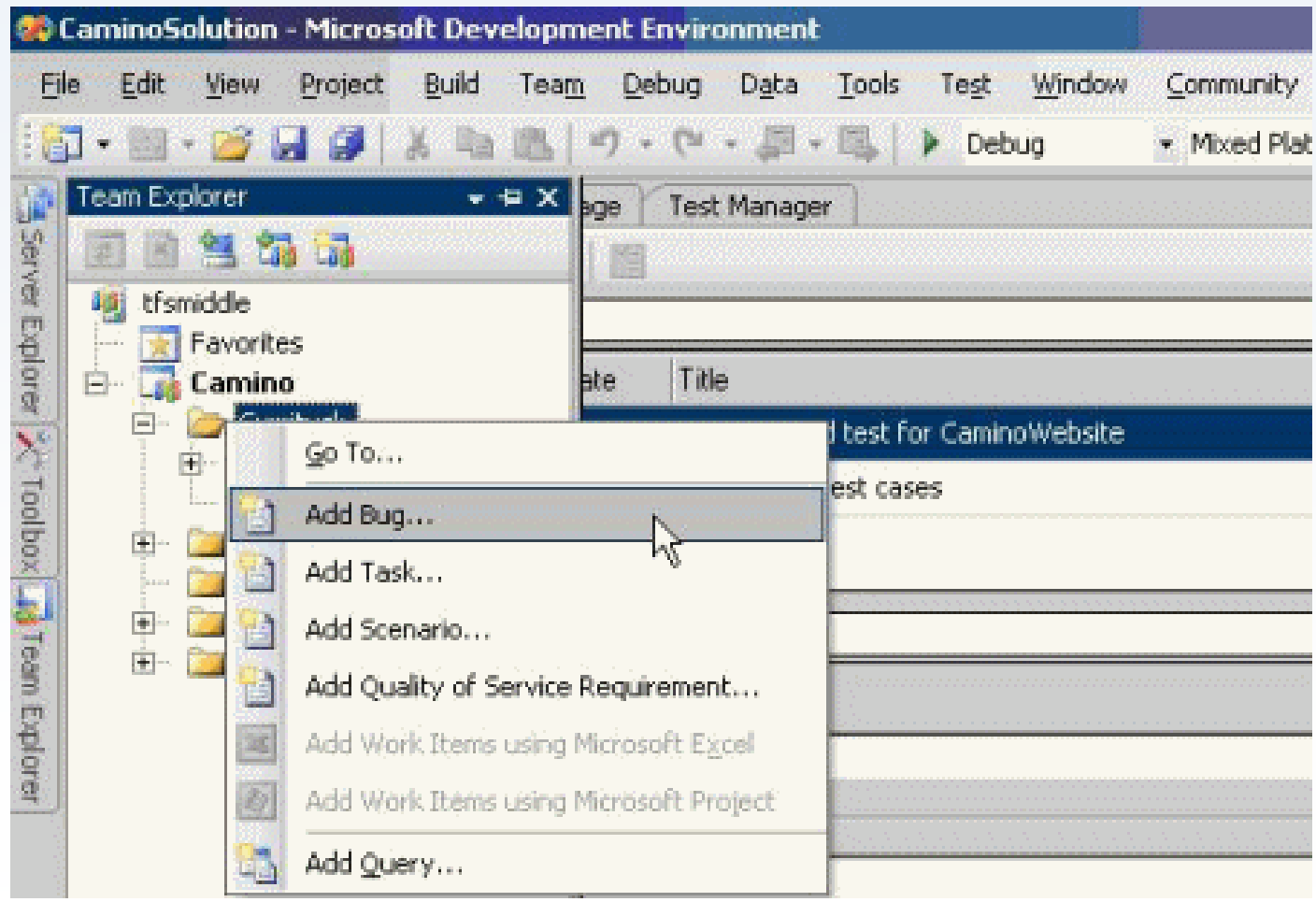
Requirements Prioritization (Kano Model)



Visual Studio Team System



Using VSTS Agile : Team Explorer Window



Using VSTS Agile : Sample Report

Area: Iteration:

Work Item Type: Trendlines:

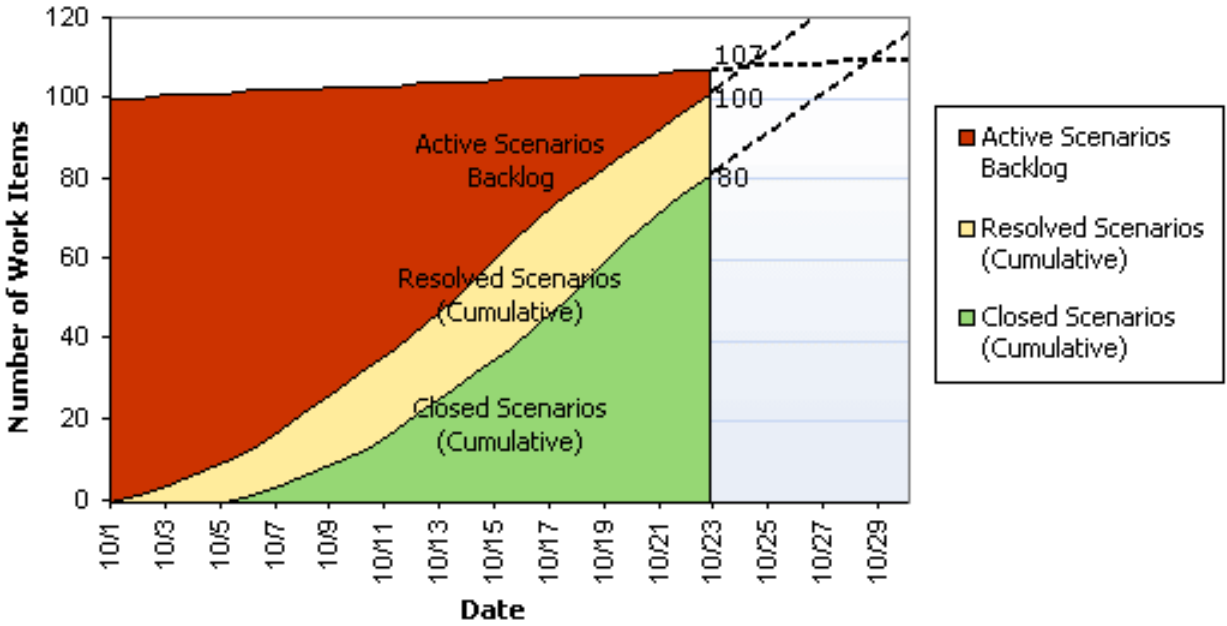
1 of 1 100% Find | Next Select a format Export

Remaining Work: Scenarios

Report generated: 11/04/2004 11:25 AM by someone@example.com

How much work is left and when will it be done?

[View report documentation](#)



Agenda

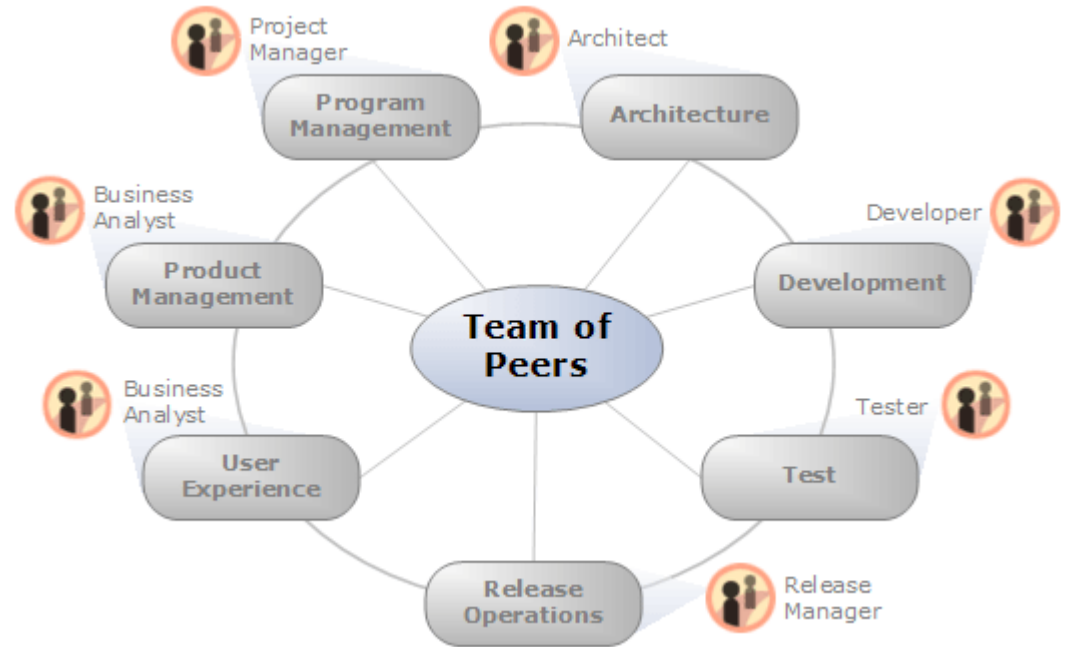
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VSTS Template Key Concepts

- Role
- Work Item
 - States and Transitions
 - Fields
- Process Guidance
 - Work Streams
 - Groups of *activities* that flow logically together
 - Often associated with a particular role
 - Activities
 - Described using EVTX format

MSF Agile Roles

- Project Manager
- Business Analyst
- Architect
- Developer
- Tester
- Release Manager



MSF Agile Workstreams

- Capture Product Vision
- Create a Scenario
- Create a Quality of Service Requirement
- Plan an Iteration
- Create Solution Architecture
- Implement a Development Task
- Build a Product
- Test a Scenario
- Test a Quality of Service Requirement
- Fix a Bug
- Close a Bug
- Release a Product
- Guide Project

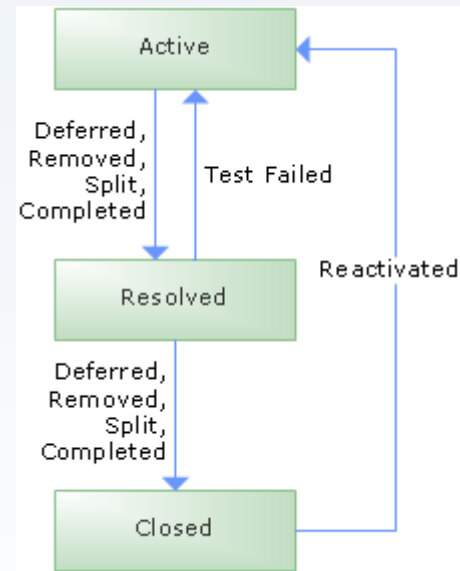
MSF Agile "Scenario" : States & Transitions

■ States

- Active
- Resolved
- Closed

■ Transitions

- Completed
- Test Failed
- Reactivated
- Split
- etc.



MSF Agile "Scenario" : Fields

Field	Description
Title	Required. The title describes the intent of the scenario. The title should be descriptive enough to allow a business analyst to write it several iterations after it was initially conceived.
Area	The area is used to group the scenario into an appropriate feature or team area. The area must be a valid node in the project hierarchy.
Iteration	The scheduled iteration is the iteration in which the scenario is implemented in code.
Assigned To	The current person that the scenario is assigned to.
State	Required. A scenario can be in the Active, Resolved, or Closed states.
Reason	The reason a scenario is in the current state. For example, a scenario can be in the Closed state because it was Completed.
Description	The description should be a high level outline of the scenario. The full scenario should be described in a scenario work product.
History	This history is a running discussion about the scenario that accumulates additional written entries as changes are made. Each time a change is made to the scenario, an entry is made in the History field describing what change was made and why, as well as any additional pertinent information about the change.
Issue	Issue is a Yes or No value indicating if the scenario is blocked on progress. If this field is set to Yes, the scenario will show up on the project manager's issue report.
Exit Criteria	Exit Criteria is a Yes or No value indicating if the scenario is part of the iteration backlog. This field is used to synchronize the various views of the backlog (the scenario list, quality of service requirement list, and iteration plan). If the exit criteria field is set to Yes, the scenario displays in the project checklist query and work product. This field will be renamed to "iteration backlog" in a future release.
Rank	Rank indicates how important the scenario is relative to all scenarios for the software product.

MSF Agile "Scenario" : Activities

Activities Tracked by Scenario Work Item



■ Business Analyst

- Develop lifestyle snapshot
- Brainstorm scenarios

■ Project Manager

- Divide scenarios into tasks

■ Developer

- Integrate code changes

■ Tester

- Write validation tests
- Select and run a test case

MSF Agile "Scenario" : Workstreams

Workstreams Containing Activities tracked by Scenario Work Item

Key

Activities used for this Work Item

Activities not used by this Work Item

Create a Quality of Service Requirement
 Business Analyst

- Brainstorm Quality of Service Requirements
- Develop Lifestyle Snapshot
- Prioritize Quality of Service Requirements List
- Write Quality of Service Requirement
- Identify Security Objectives

Create a Scenario
 Business Analyst

- Brainstorm Scenarios
- Develop Lifestyle Snapshot
- Prioritize Scenario List
- Write Scenario Description
- Storyboard a Scenario

Fix a Bug
 Developer

- Reproduce the Bug
- Create or Update a Unit Test
- Locate the Cause of a Bug
- Reassign a Bug
- Decide on a Bug Fix Strategy
- Code the Fix for a Bug
- Perform a Unit Test
- Refactor Code
- Review Code
- Integrate Code Changes

Implement a Development Task
 Developer

- Cost a Development Task
- Create or Update a Unit Test
- Write Code for a Development Task
- Perform Code Analysis
- Perform a Unit Test
- Refactor Code
- Review Code
- Integrate Code Changes

Guide Iteration
 Project Manager

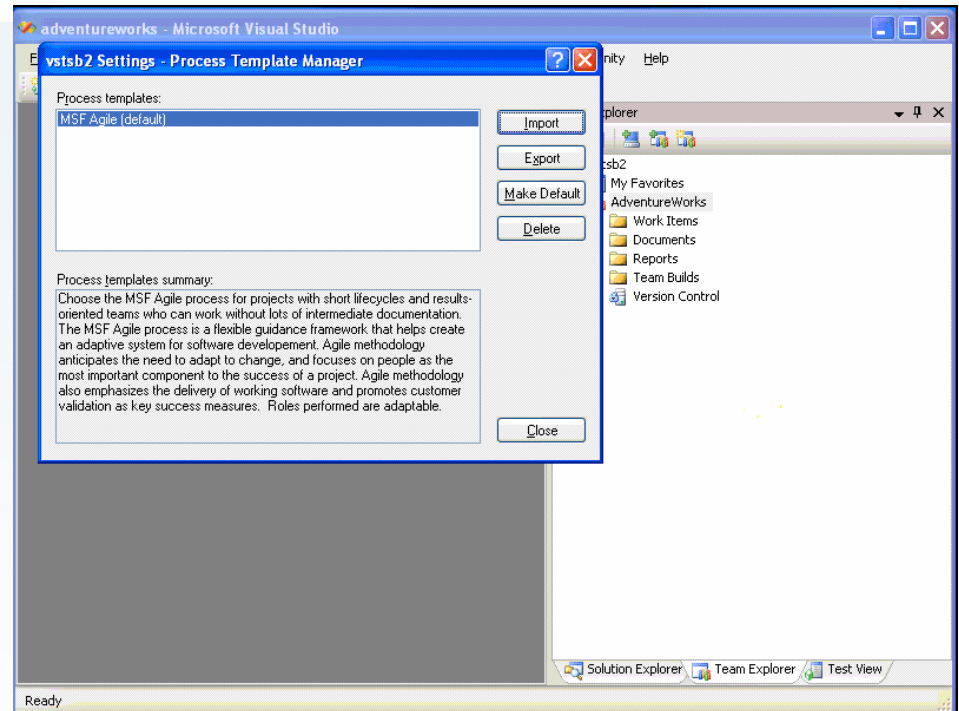
- Monitor Iteration
- Mitigate a Risk
- Conduct Retrospective

Role: Developer
Workstream: Fix a Bug

This activity affects the Scenario work item.

Process Template Manager

- Work items
- Work item instances
- Reports
- Security groups
- Project portal
- Documents / templates
- Source control settings
- Process guidance content
- Iteration structure
- Entry criteria and exit criteria views
- Source check-in policies



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Microsoft Solutions
Framework for Agile
Software Development

Microsoft
Visual Studio
Team System

Granville Miller

Granville Miller

Microsoft Solutions Framework for Agile Software Development

The Definitive Guide to Microsoft's
New Agile Methodology

**The definitive guide to Microsoft's new
agile software development process,
from the architect of the technology**

This book presents the definitive yet practical description of Microsoft Solutions Framework (MSF) for Agile Software Development, a new approach to agile software development from Microsoft providing a vehicle for Microsoft to deliver innovative software development practices from requirements through deployment and operations. MSF for Agile Software Development is a scenario-driven development process for building .NET, Web, Web Service, and other object-oriented applications. It directly incorporates practices for handling quality of service requirements such as performance and security and utilizes a context-driven approach (context-based) to determine how to operate the project.

©2006, Paper,
0-321-33644-5, \$39.99

Microsoft
Visual Studio
Team System

For More Information

- ***Stay Active In Your Local .NET Community!!***
- MSF Home Page
 - <http://www.microsoft.com/msf>
- Randy Miller's Blog (Agile)
 - <http://blogs.msdn.com/randymiller>
- Rob Caron's Blog (VSTS)
 - <http://blogs.msdn.com/robcaron/>
- SCRUM
 - <http://www.controlchaos.com/about/>
 - VSTS plug-in available from Conchango
- Capability Maturity Model Integration (CMMI)
 - <http://www.sei.cmu.edu/cmmi/>
- Microsoft Services QuickPlan for Team-Based Software Development