

CollabNet

Agile Upstream and Downstream Linking together agile processes and practices

About CollabNet

Market Leader

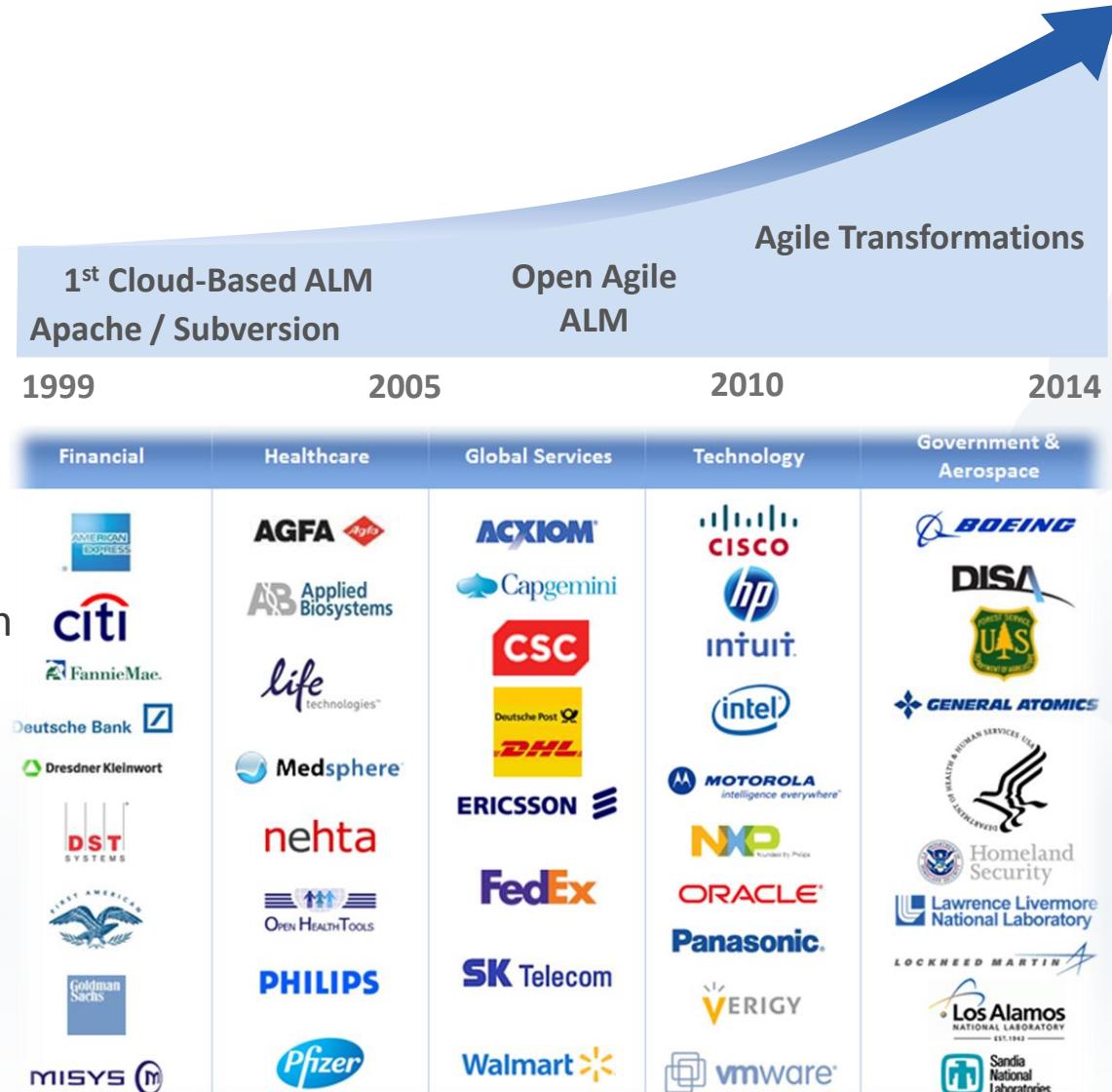
- Gartner MQ Leader –
 - Federated ALM Solutions
- ALM, SCM, Cloud, Agile
- Enterprise Agility Experts

Legacy and Leadership

- Creator of Subversion (SVN)
- Open Source Federation
- First Cloud-based ALM solution

Scalable and Secure

- 10,000 Customers
- Impressive Client list
- Six Million Users Worldwide
- DOD Secure



Services, Training and Coaching

Agile and Certified Scrum Training and Coaching

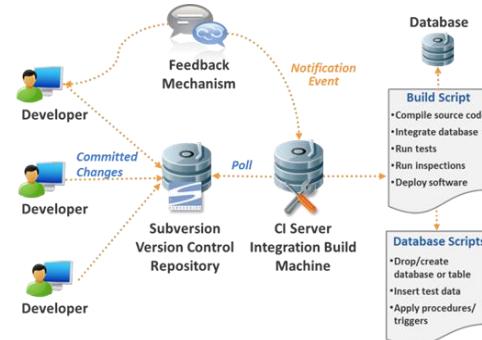
 Certified ScrumMaster	 PMI-ACP® Exam Prep Course	 Private Custom/Agile Training
 Certified ScrumMaster Experience (3 days)	 Agile and Scrum Essentials	 Free Agile e-learning
 Certified Scrum Product Owner	 Agile Coaching	

Workshops

SVN and Git Applied Workshops



Agile Development Applied Workshop



DevOps Applied Workshop



Workshop Goals & Format

- Goals

- Understand Upstream and Downstream Agile
- Understanding of common solutions for Enterprise Agile Transformation
- Agile practices such as code review, continuous integration, test driven development across the enterprise
- Leave better informed

- Format

- Interactive workshop
- Meetup-style
- Split into 4 topics:
 - Problem/Solution review
 - Moderated group discussion



Workshop Agenda

- 4:00 – 5:00 PM : Appetizers and Drinks , Networking
- 5:00 – 5:10 PM : Kick-off, Post-it Goals
- 5:10 – 5:40 PM : Upstream & Downstream Agile
- 5:40 – 6:00 PM : Continuous Integration and Testing
- 6:00 – 6:10 PM : Break
- 6:10 – 6:30 PM : Case Study Exercise - Deutsche Post
- 6:30 – 6:50 PM : Solution Example
- 6:50 – 7:00 PM : Questions and Wrap Up



Agile Upstream and Downstream

The Challenges & Issues

- Agile development and delivery are creating faster cycle times
- Proliferation of un-connected teams, processes and tools are:
 - Limiting agility & scale
 - Blocking visibility & governance
 - Tying up resources better spent on delivering value & innovation



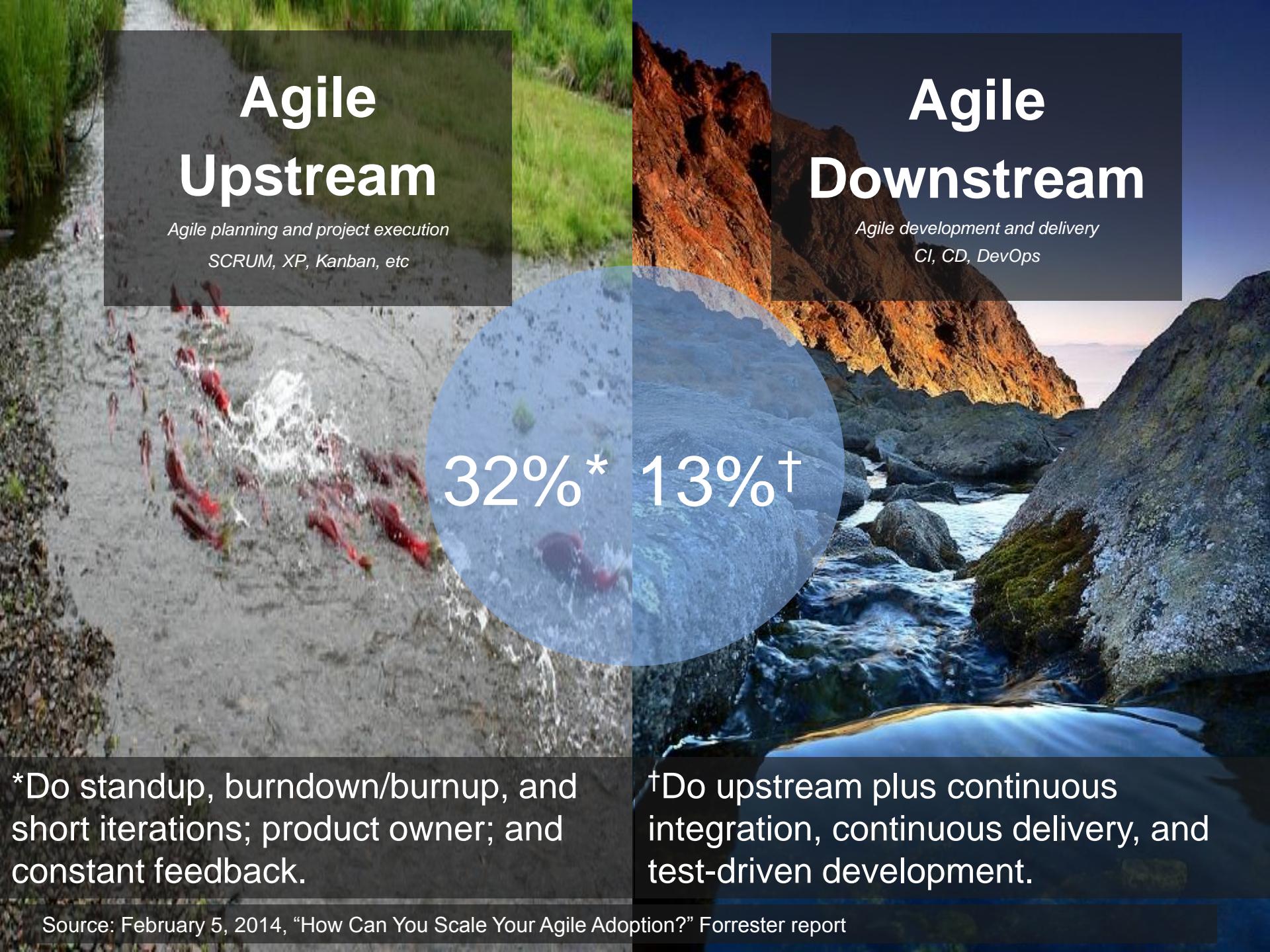
- Going Agile and Lean?

Over 40% of companies have adopted Agile, but less than 20% have scaled Agile across the Enterprise. How should you transform your organization, scale your efforts, and make your software delivery efforts – both custom developed and packaged application – more responsive to changing business needs?

“Most firms are experiencing rapid and fundamental change in both business and technology. How do you cope? You must *transform* your software delivery approach.”

- The Bigger You Are, The More You Need The Right Tools

Low-tech management is completely appropriate at the Project level, but the complexities of cross-Project dependencies and disparate work streams grow exponentially in larger organizations. Tools that can aggregate and analyze key planning, progress, and resource-related data are critical to staying on top of a value-driven portfolio.



Agile Upstream

Agile planning and project execution

SCRUM, XP, Kanban, etc

Agile Downstream

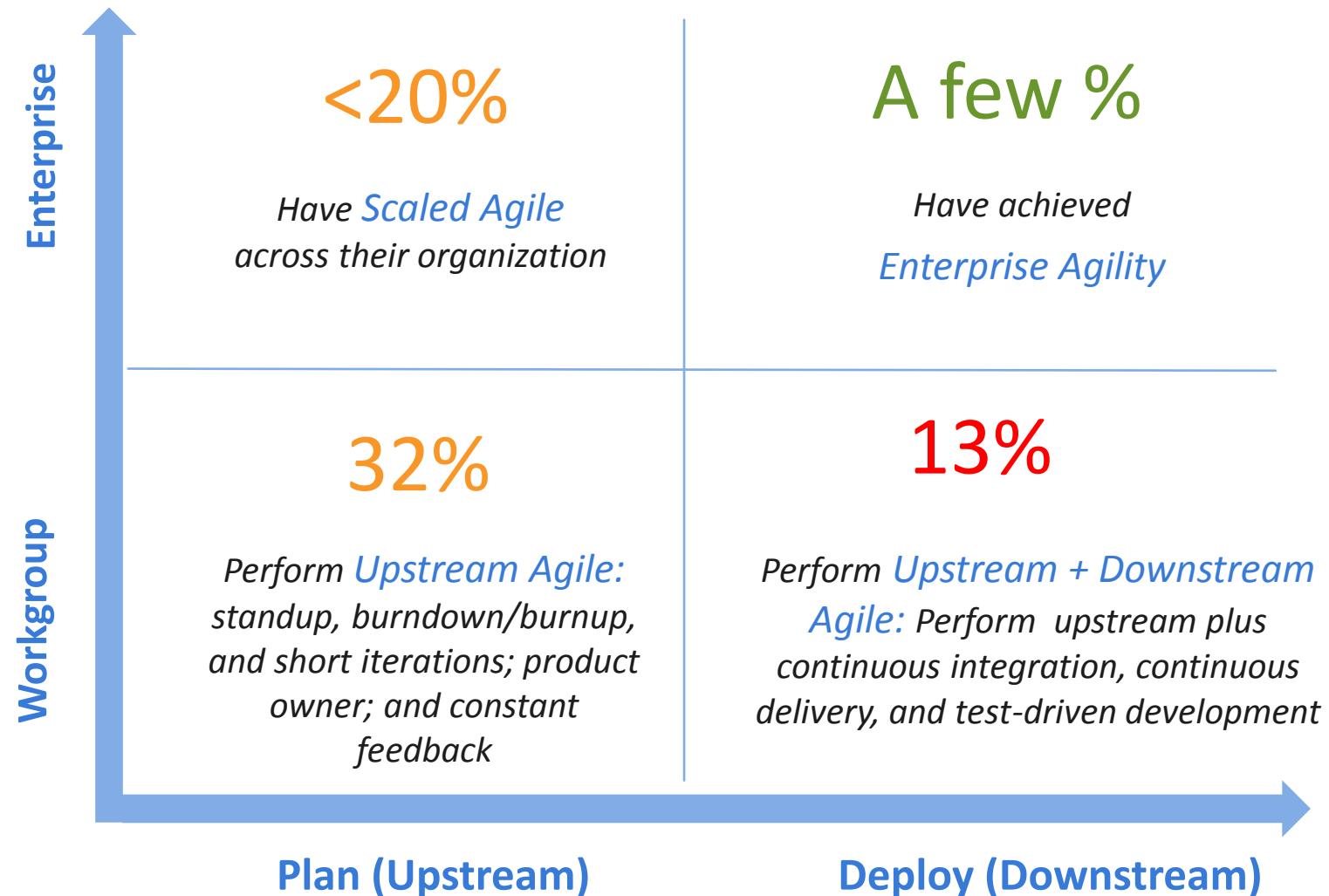
Agile development and delivery

CI, CD, DevOps

*Do standup, burndown/burnup, and short iterations; product owner; and constant feedback.

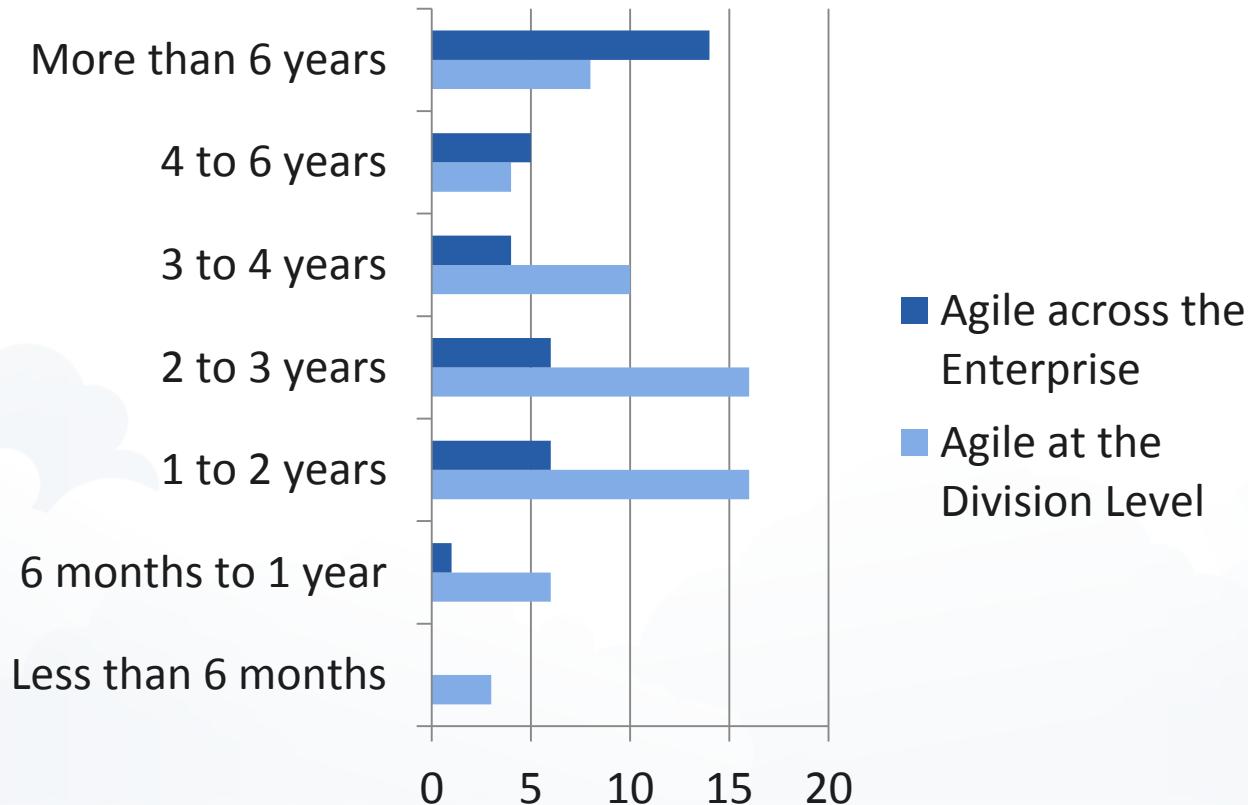
†Do upstream plus continuous integration, continuous delivery, and test-driven development.

Few Companies Have Achieved Enterprise Agility



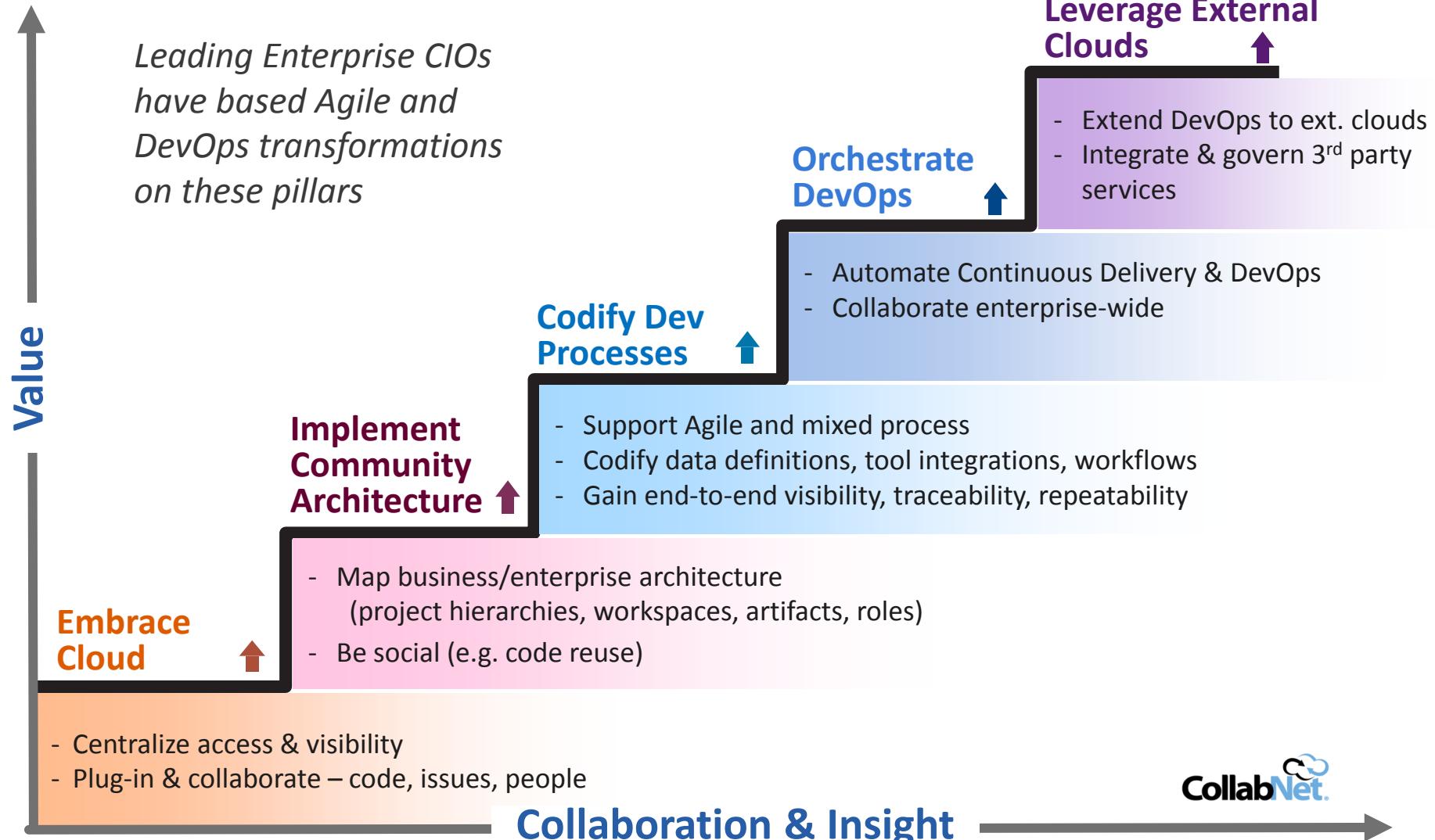
The agile journey

"It takes years to scale agile and replicate the initial benefits . . . "

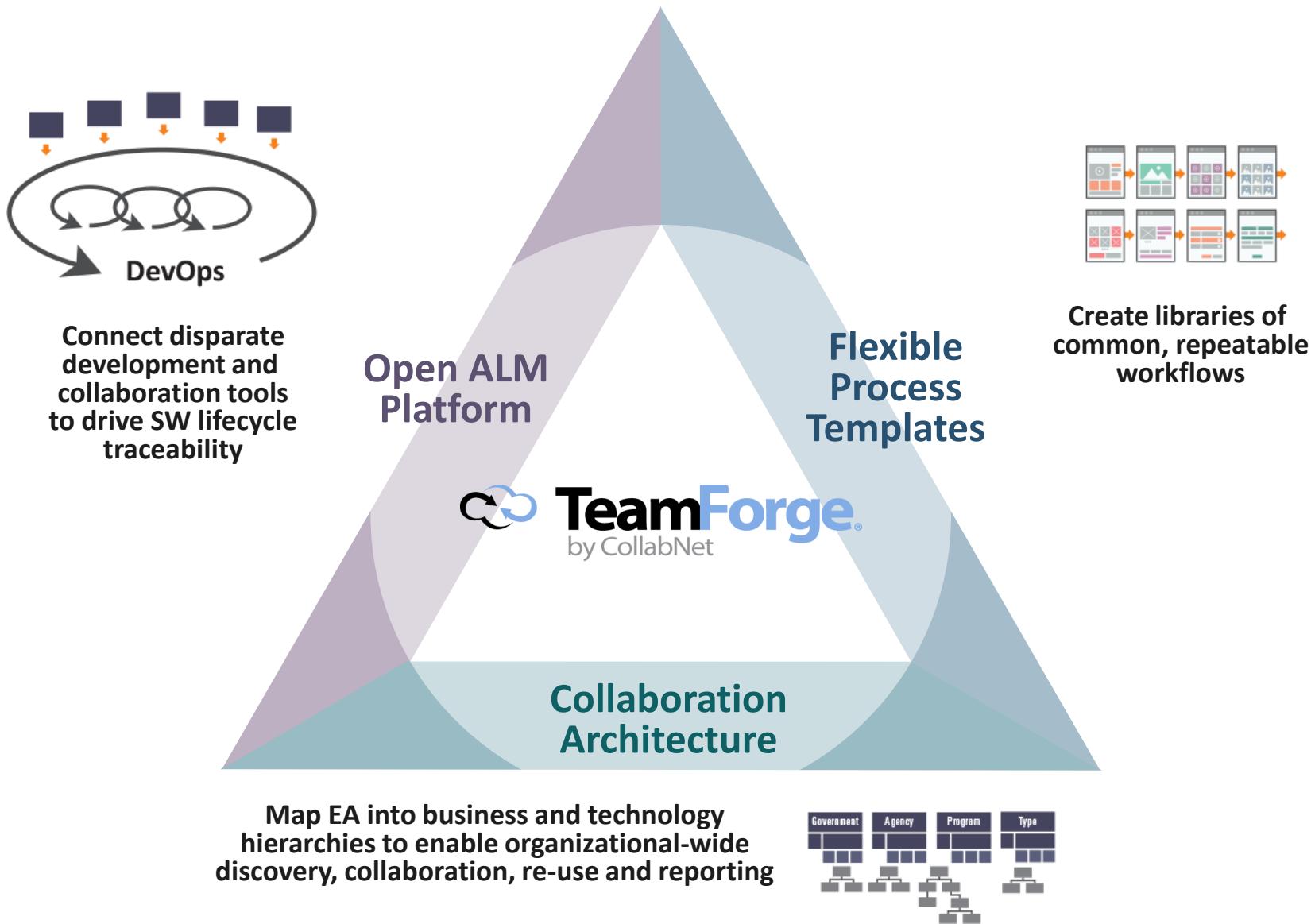


Source: Q3 2013 Global Agile Software Application Development Online Survey, Forrester Research, Inc.

Blueprint for Enterprise Agility

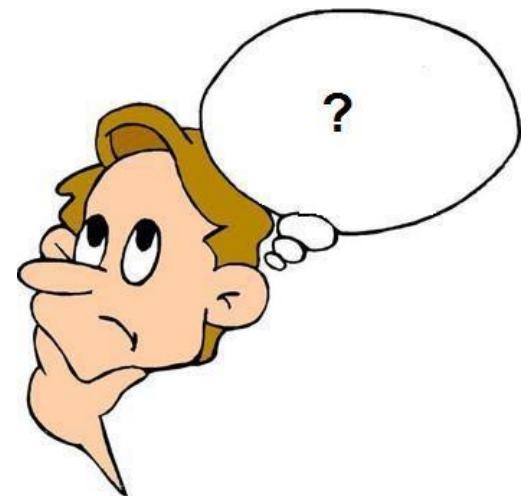


TeamForge Platform



Group Discussion

- Do you support mixed agile methodologies across your organization? How?
- What tools make up your common tool chain across teams?
- What stakeholders are represented as part of your agile team?

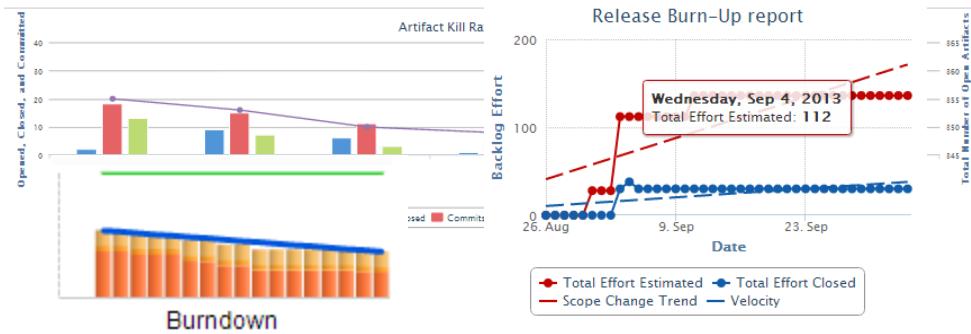


Work item and Code Management

Upstream “must haves”*



The daily standup



Reports accessible to all stakeholders



Put
Product
Owners in
charge

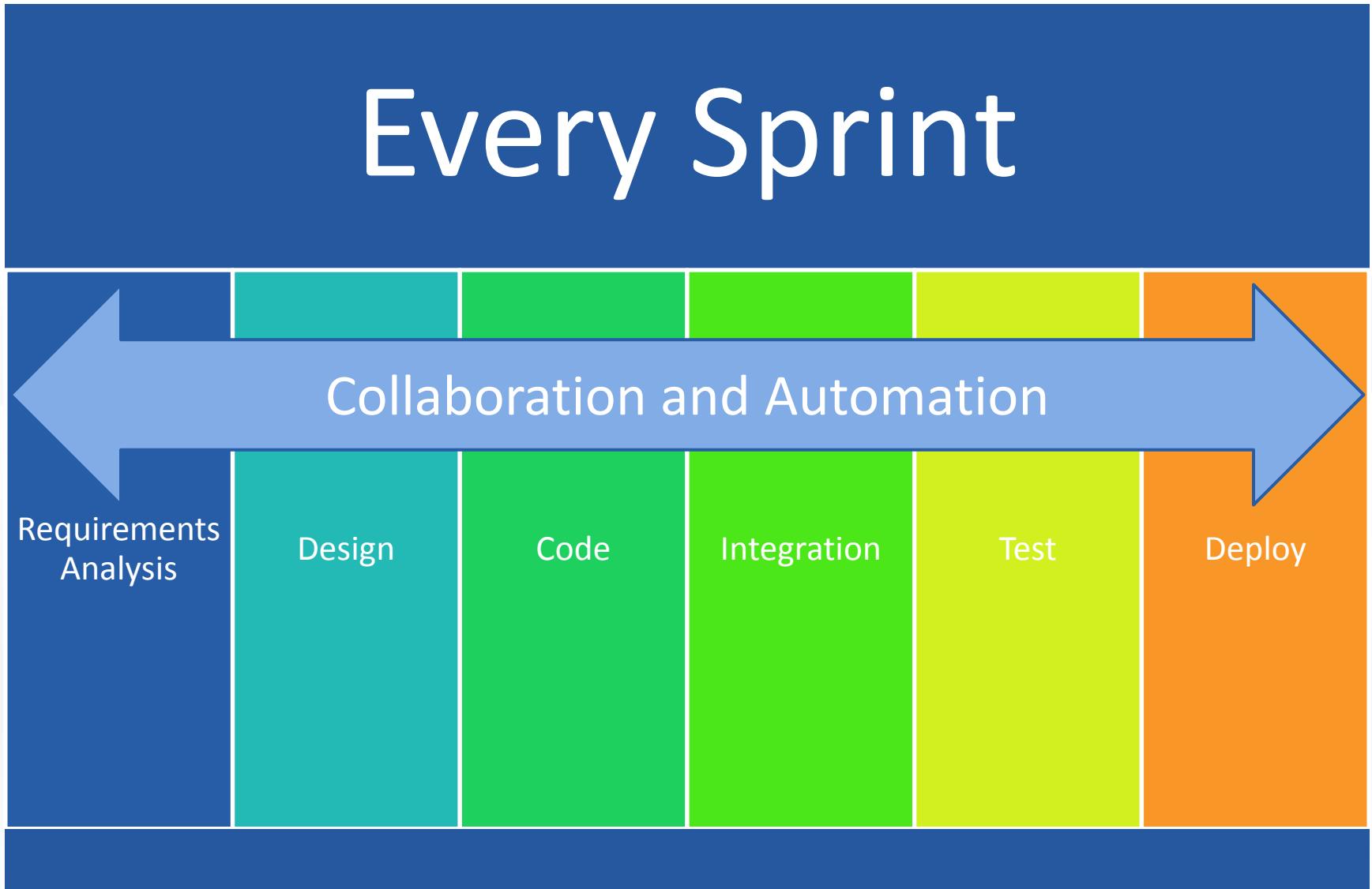


Break requirements
into small chunks,
iterate and collect
feedback.

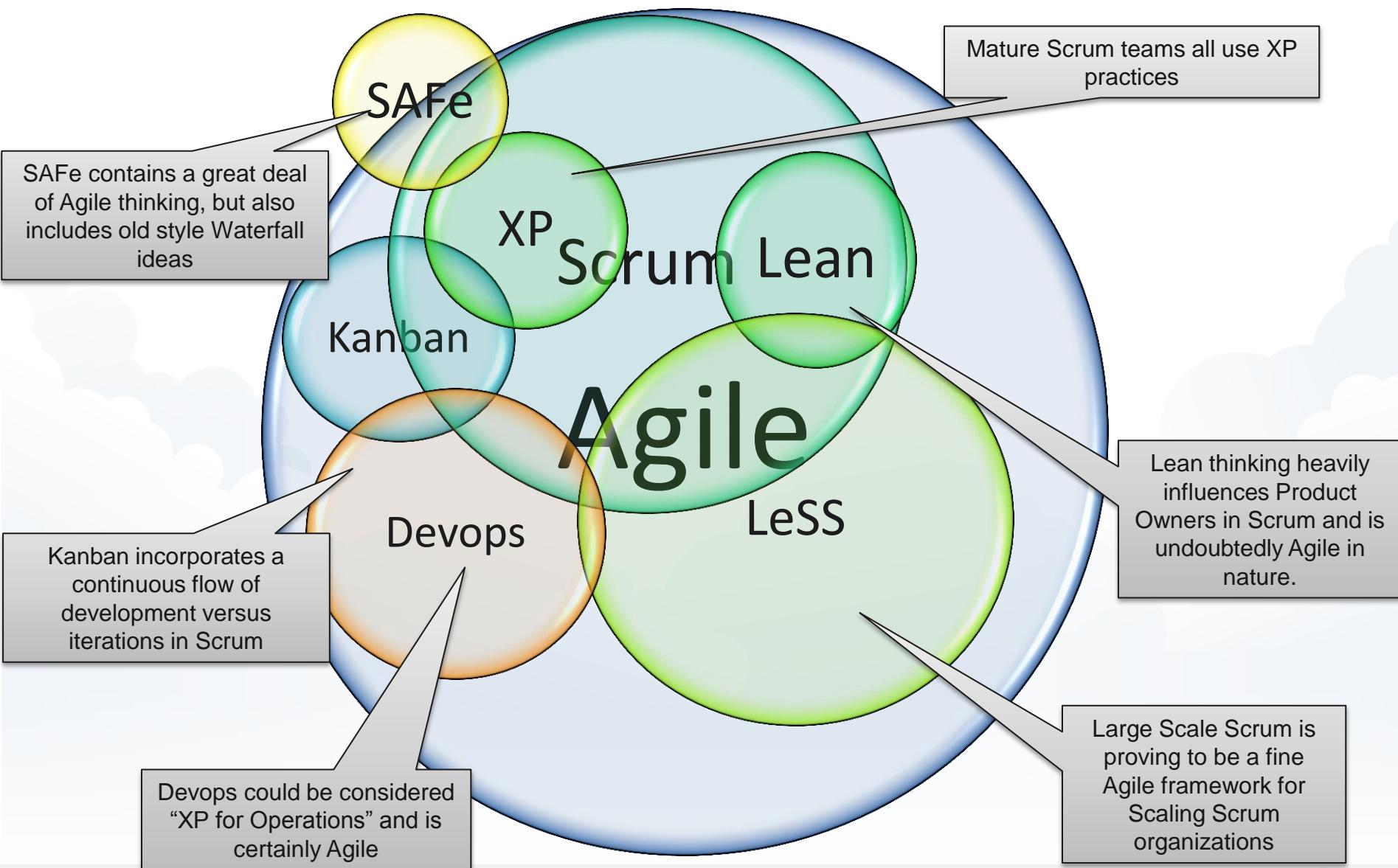


Connect Agile projects
to enterprise PMO planning
and reporting.

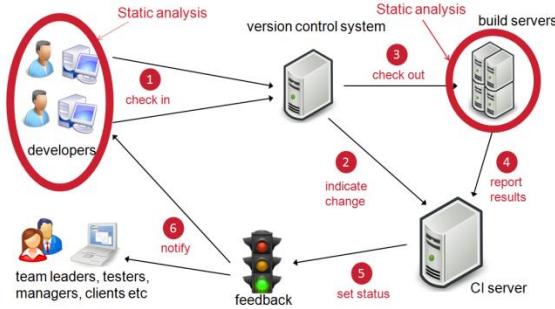
* “How Can You Scale Your Agile Adoption?” by Diego Lo Giudice, February 5, 2014 Forrester



So what Agile processes do you use?



Integrate downstream practices early*

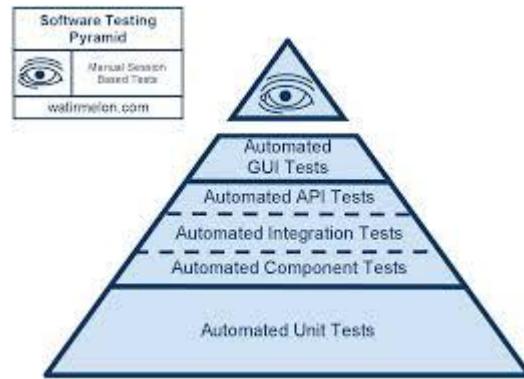


Build and Integrate
Build, automate, and commit daily

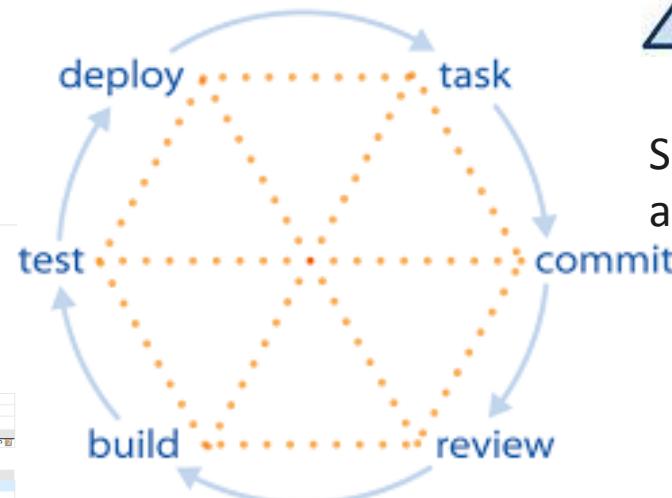
A screenshot of a code review interface. At the top, it shows a pull request summary: 'Type: Merge', 'Author: Stephan Fournier', 'Status: Review In Progress'. Below this are sections for 'Reviewer' (Stephan Fournier, Merge if Necessary), 'Dependencies' (empty), and 'Review'. The 'Review' section shows a diff between 'Patch Set 1' and 'Patch Set 2', with a note: 'Reviewed all utility methods to one class'. At the bottom, there's a 'Review' table with columns: File Path, Comments, Size, Diff, and Reviewed.

Code Review

Rules determined by needs of team



Test
Shift to the left;
automate unit testing.

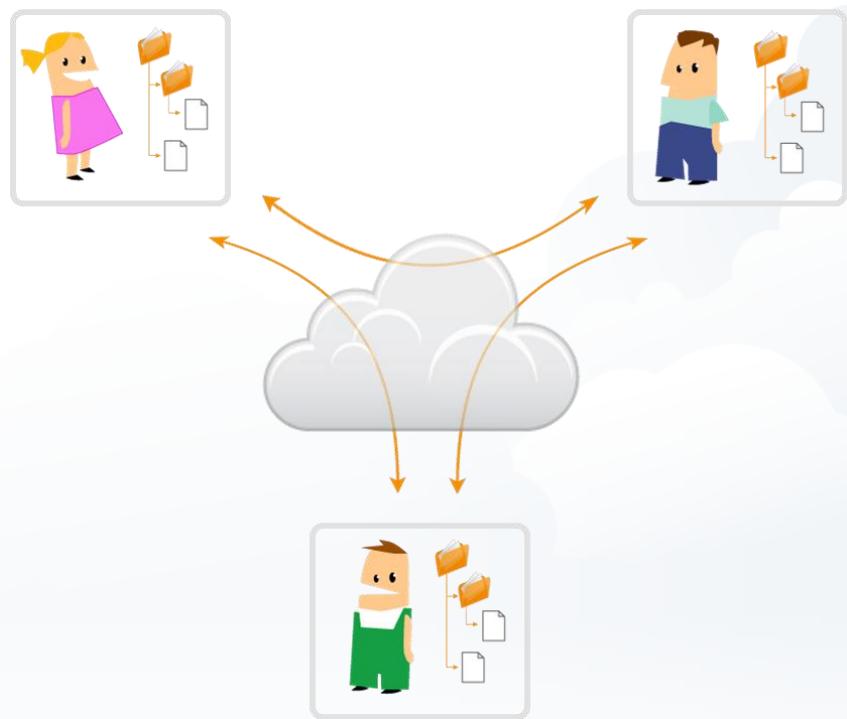
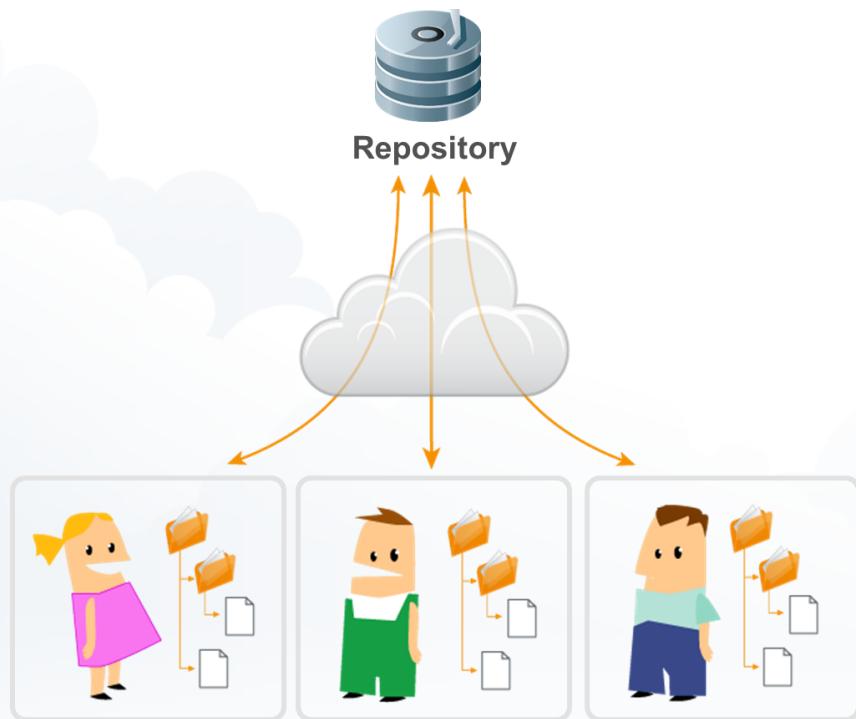


DevOps
Deliver and
deploy

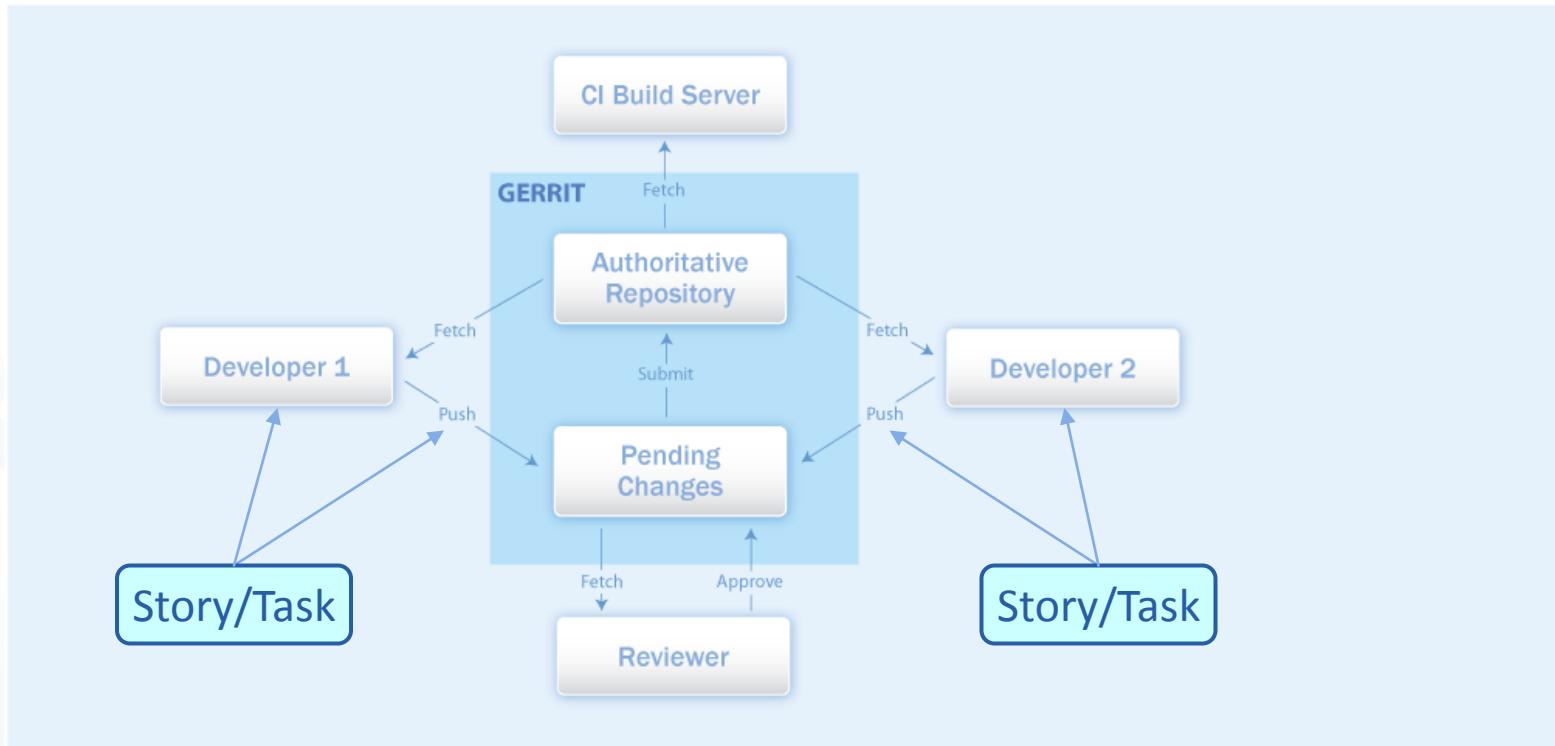
Do so daily and
automate more.

* "How Can You Scale Your Agile Adoption?" by Diego Lo Giudice, February 5, 2014 Forrester

Centralized or Distributed SCM?



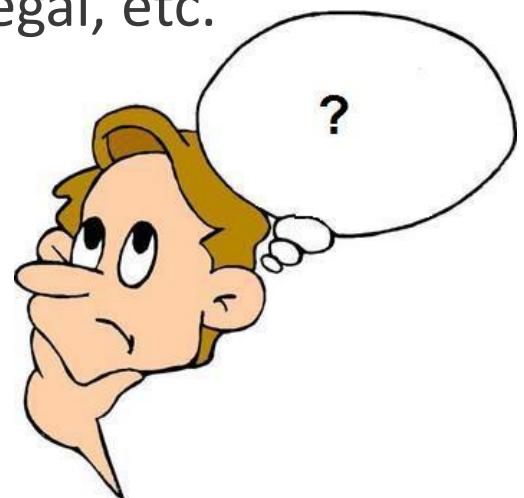
Tool assisted Code Review



- Work item picked up by developer
- Associated to push/commit
- Reviewed and tied to review

Group Discussion

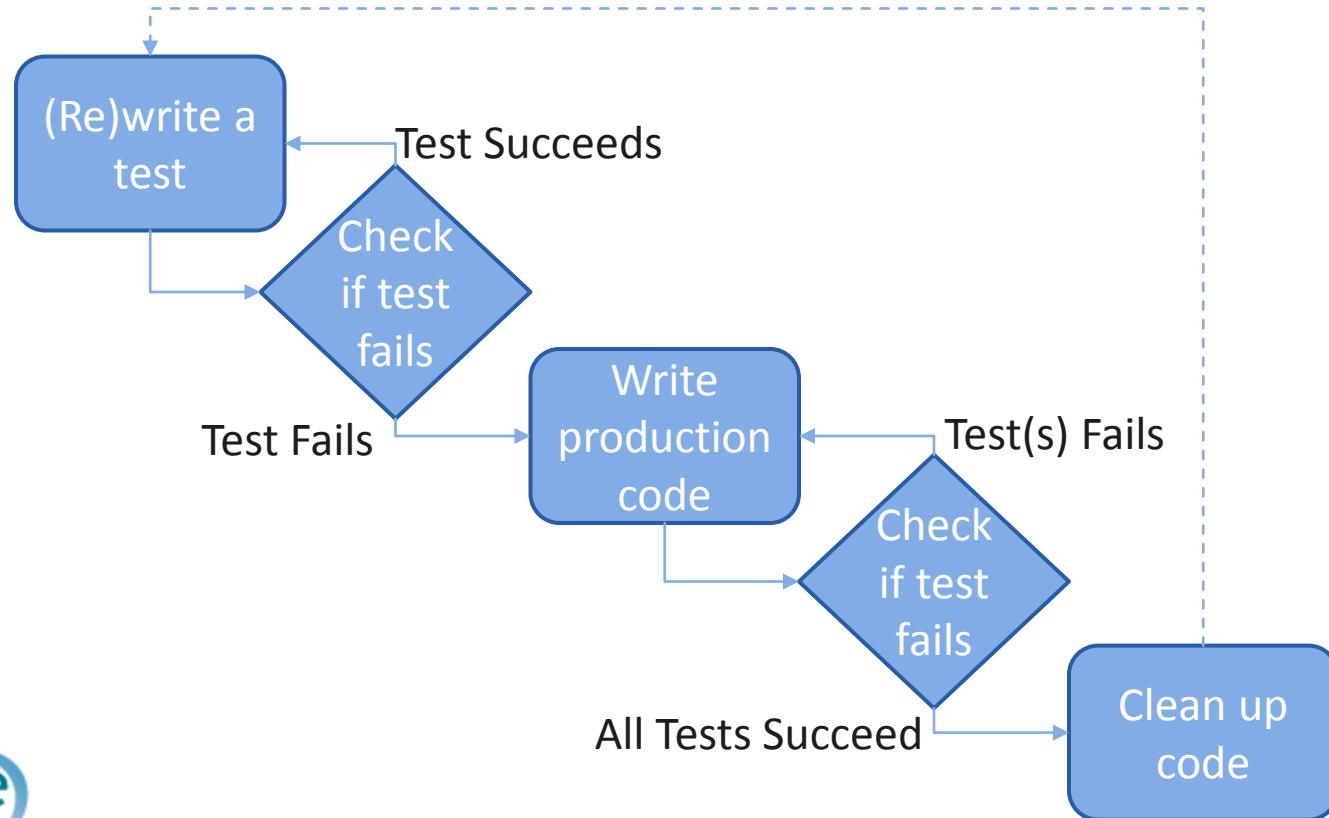
- Please describe your backlog grooming process?
- What tools make up your work item and source code management? How do you track the relationship between the systems?
- Are there any work items that are not accounted for in your backlog? i.e. QA defects, operations tasks, legal, etc.



Testing and Continuous Integration

Test Driven Development

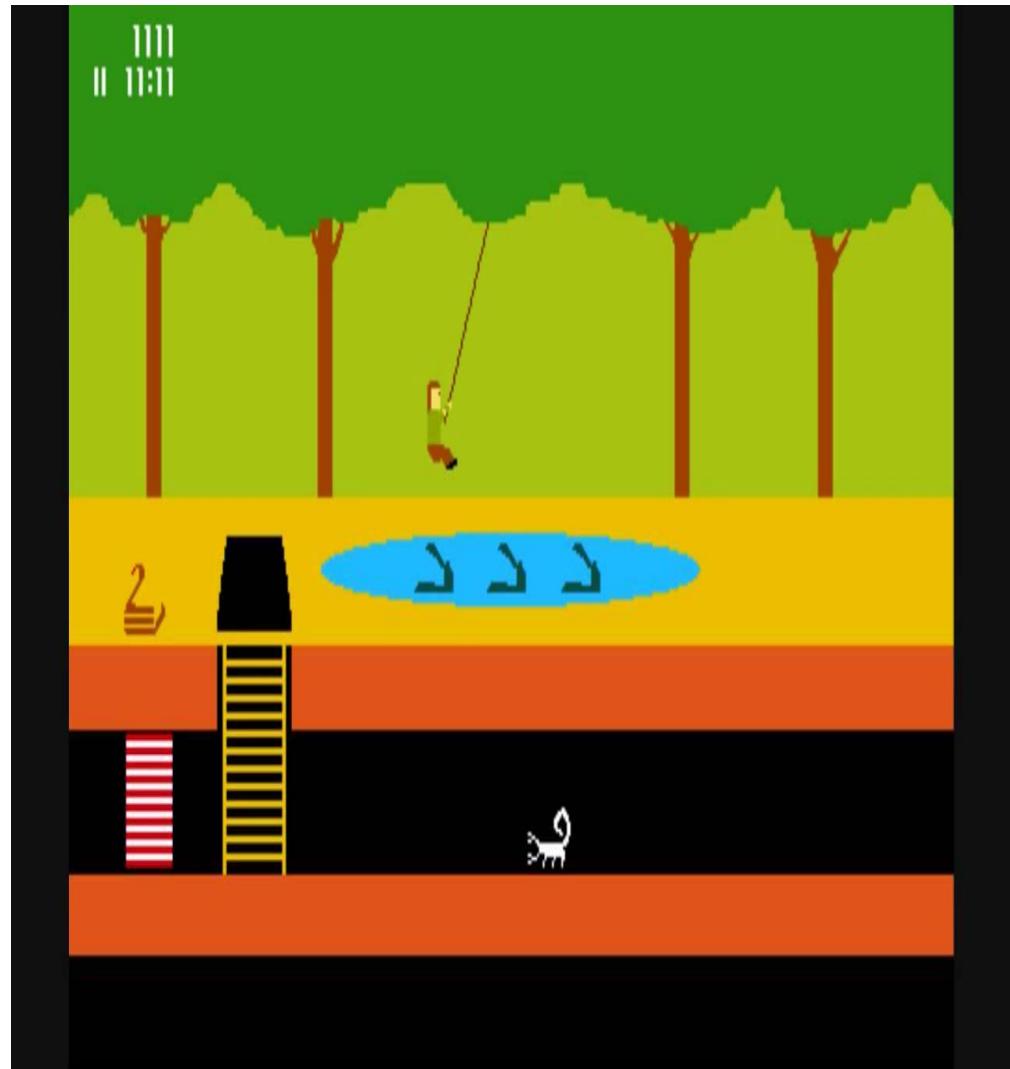
A style of programming in which three activities are tightly interwoven: coding, testing (in the form of writing unit tests) and design (in the form of refactoring).*



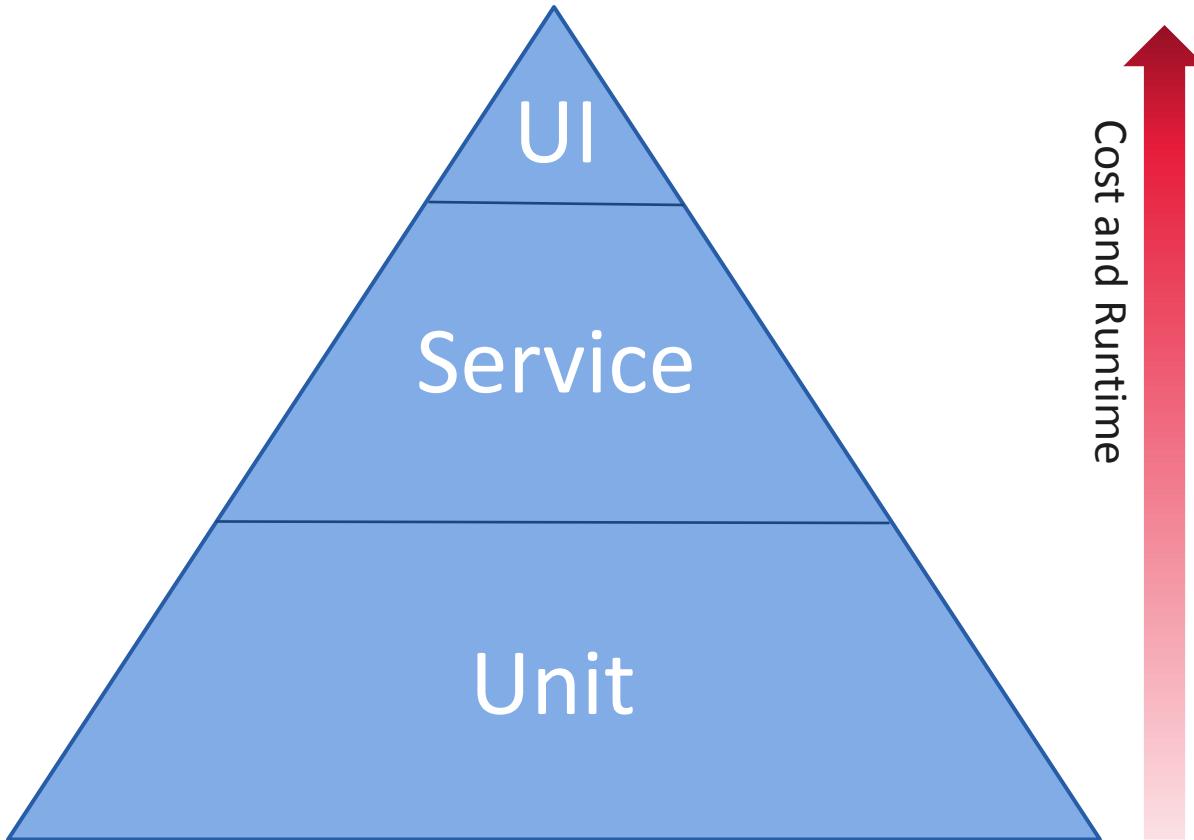
* Agile Alliance Resource Guide <http://guide.agilealliance.org/guide/tdd.html>

Common Pitfalls

- Writing too many tests at once
- Tests that are too large
- Partial adoption by developers
- Abandoned Test Suite
- Runs too long (Poor maintenance)
- Forgetting to run tests frequently



Testing Pyramid*



The higher we go . . .

- *The more unreliable*
- *Greater cost*
- *Slower feedback*

* Concept by Mike Cohn - <https://www.mountaingoatsoftware.com/company/about-mike-cohn>

Continuous Integration has evolved

As defined in 2006...

“Continuous Integration is a software development practice where members of a team integrate their work frequently, usually each person integrates at least daily - leading to multiple integrations per day. Each integration is verified by an automated build (including test) to detect integration errors as quickly as possible...this approach leads to significantly reduced integration problems and allows a team to develop cohesive software more rapidly.”

Continuous Integration and todays technologies...

“Today, meaningful integration happens less in source control and more frequently in a runtime environment... if you want to quickly verify that the work of two developers is not conflicting, you need to run API tests, as well as some functional tests scenarios. That means bringing the various services into an integration test environment, and validating runtime functionality at a pace similar to the classic CI build loop ”

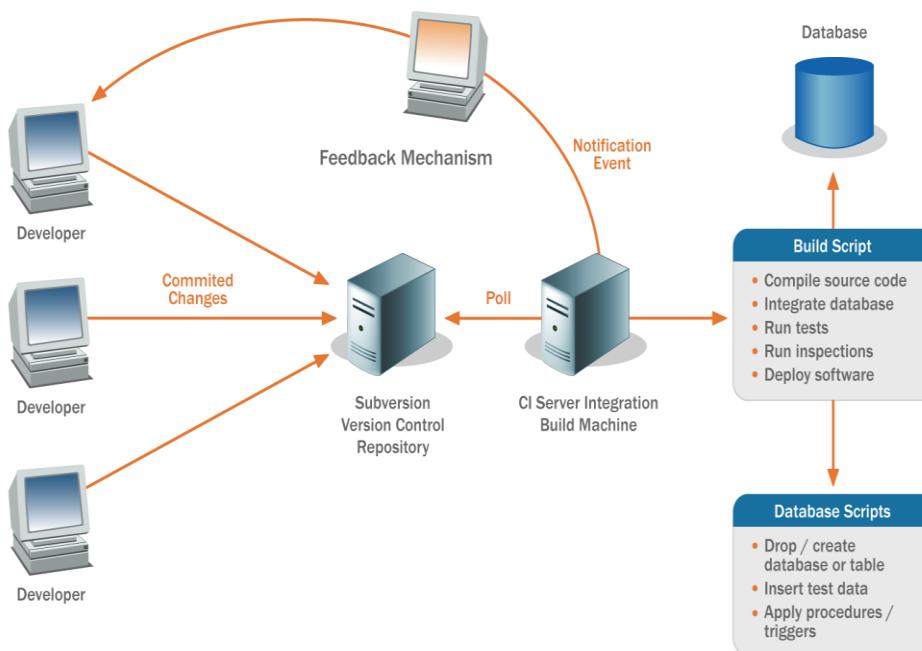
]

What is CI?

feed•back /'fēd,bak/

Noun: Information about reactions to a product, a person's performance of a task, etc., used as a basis for improvement.

The modification or control of a process or system by its results or effects, e.g., in a biochemical pathway or behavioral response.

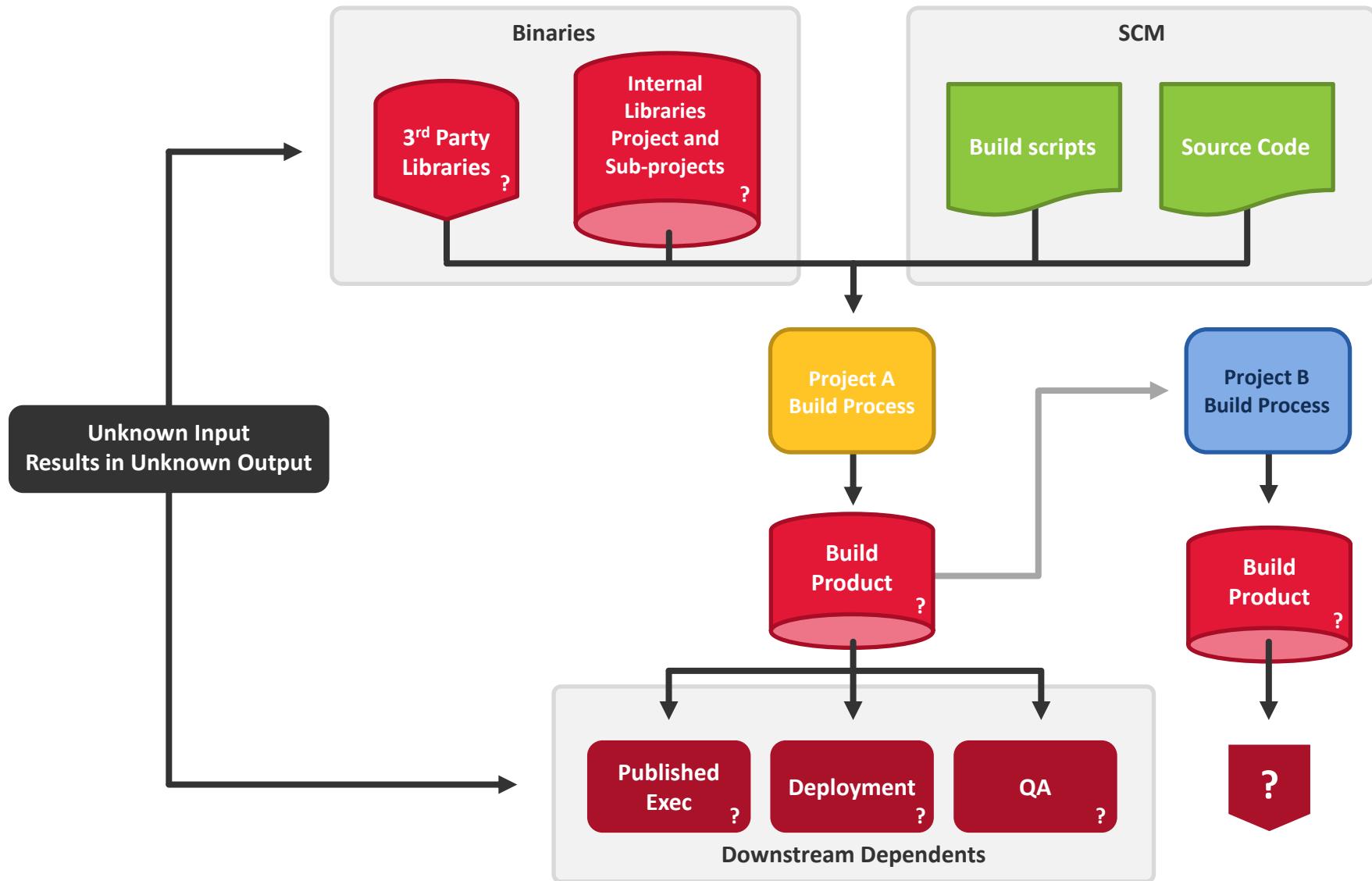


“Information produced during the software development process, provided to process participants and used to improve the product of that process.”

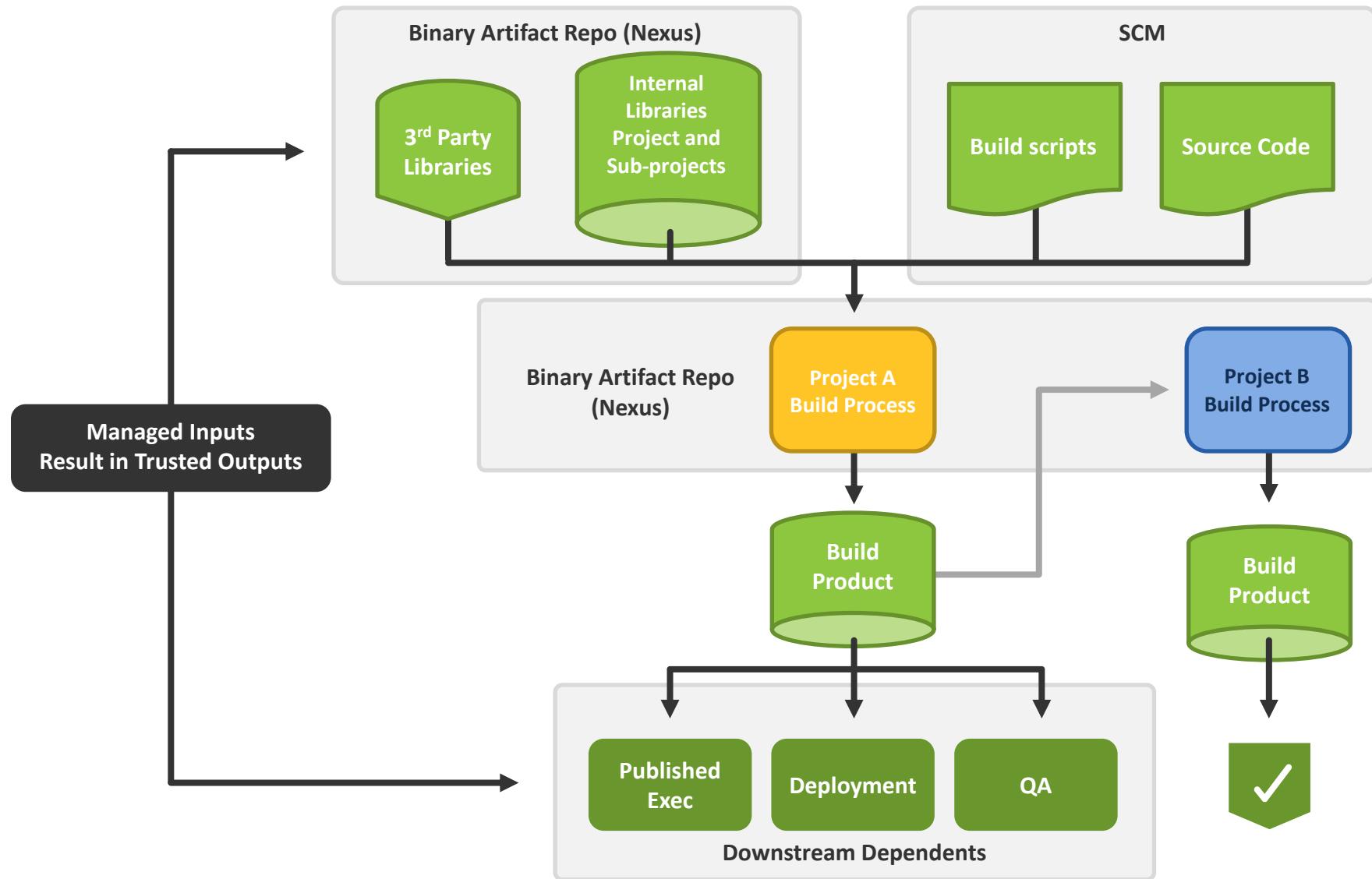
Why CI?

- Automation of repetitive manual processes
- More time focusing on adding value
- No need to wait hours, days, months to know how check-in affects the build
- Constant availability for the build for testing, demo or release
- Shared visibility and team ownership
- Increased team productivity
- Higher quality software, faster!

Binary Artifact Management



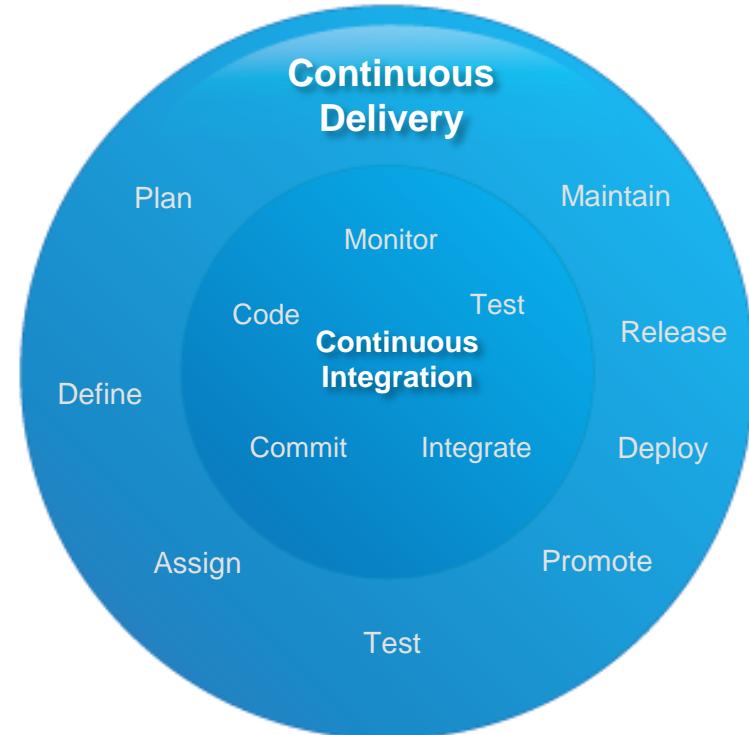
Binary Artifact Management



Continuous Integration vs. Continuous Delivery

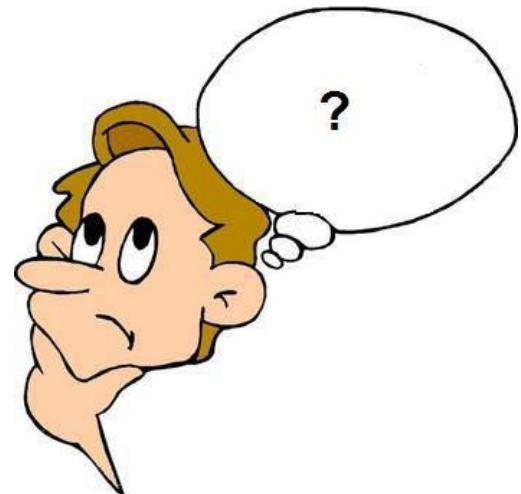
- Continuous Delivery extends the CI process from build to include test and deploy phases
 - Release ready, deployable software
 - Ensure fluid coordination and communication between stakeholders
 - Handle need for governance

“Continuous delivery of software needs processes that encompass the entire delivery process..”



Group Discussion

- What is your organization/teams definition of “done”? And is it the same for the organization?
- What testing standards exist in your organization today?
- Is anyone doing continuous delivery today? Please share with the group!

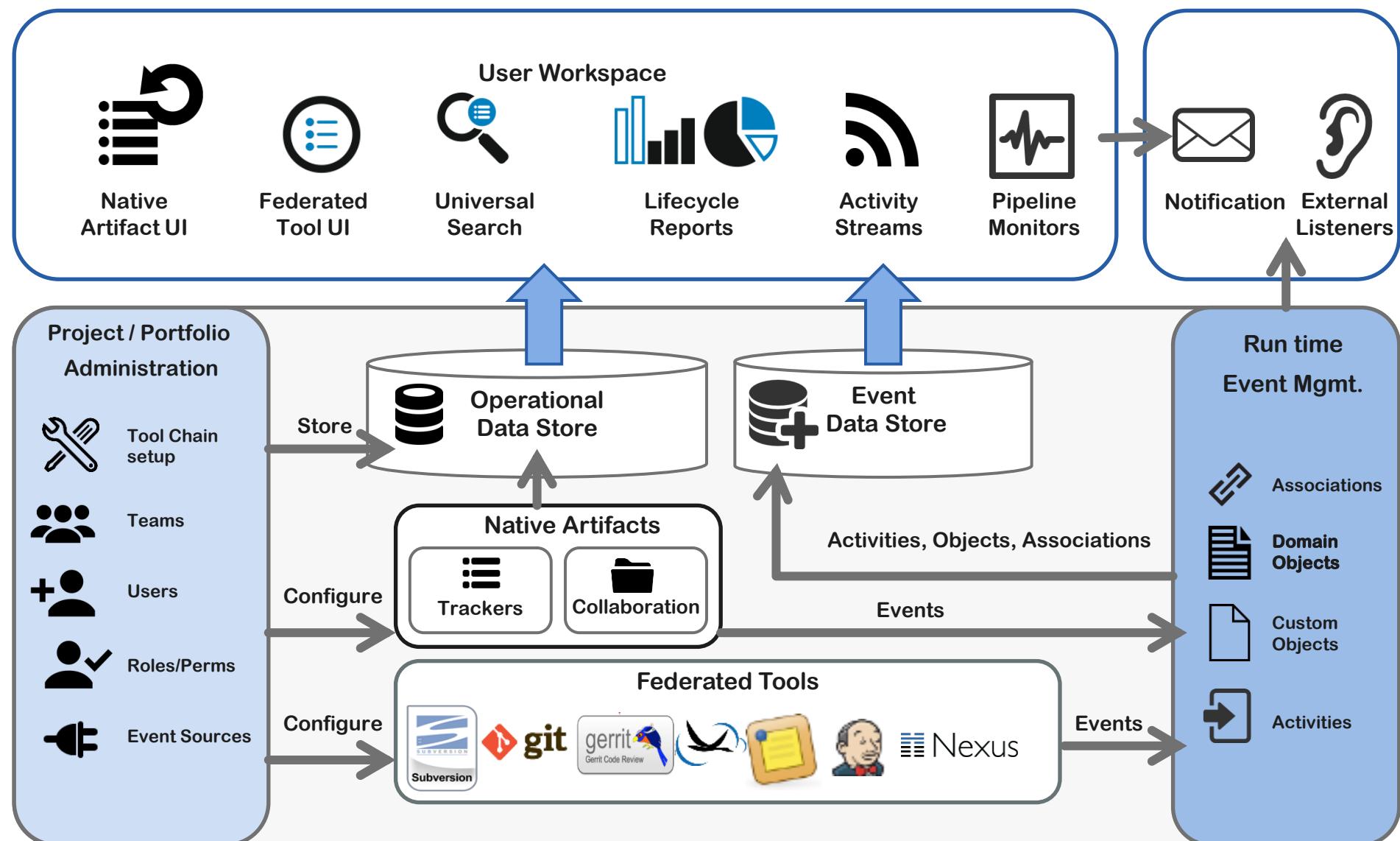


Break

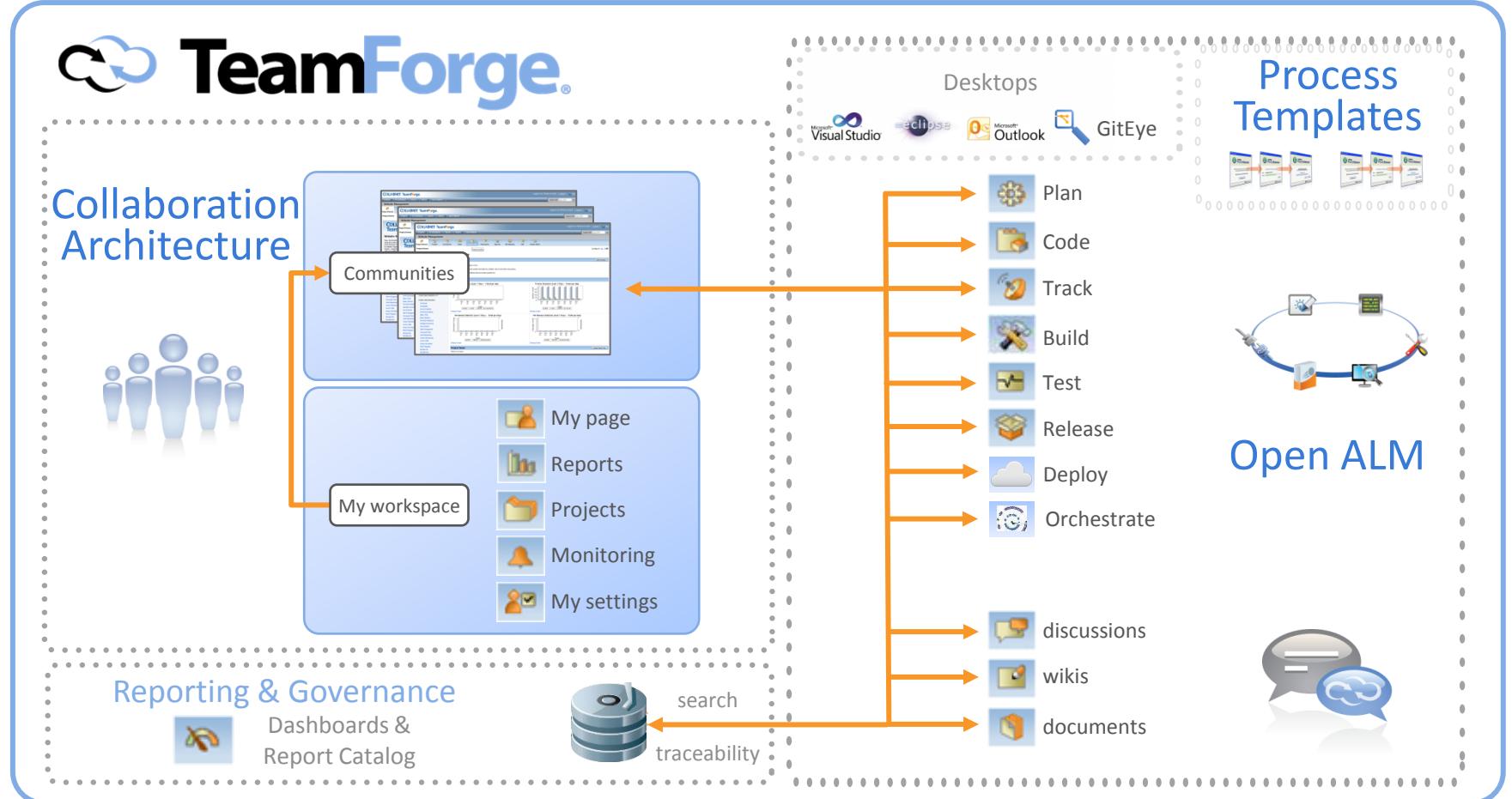
Case Study

Section 4: Solution Example

TeamForge Platform



TeamForge Capabilities



- *Cross-project collaboration architecture*
- *Reporting & Governance*
- *Integrated ALM development and collaboration tools*
- *Flexible and repeatable process templates*

Single portal for all teams

Project Categories / Project List

Project Categories

- Business Sectors
 - Chicago Development
 - Development Community
 - Financial Services Products
 - Geographies
 - Healthcare Solutions
 - BI/Dashboards
 - Provider/Patient Portals
 - Service Bus
 - Workflow Optimization
 - Industries
 - Product Categories
 - Professional Services
 - S/W Technology and Development
 - Technologies
 - Telecom

Category: Project Categories
Description: All projects

Toggle: Filter Details Include Sub-categories

PROJECT	ACTIVITY RANKING	PROJECT MEMBERS	LAST ACTIVITY	DOWNLOADS
almagile An Agile ALM Project	100%	29	05/08/2015	
ecdevelopment An ECD Development Project	99.9%	4	02/17/2015	
Simulator A simple, 2 dimensional combat simulator that looks a lot like an old-school video game.	99.8%	23	05/14/2015	 Combat Simulation in 2D (22)  Internet Chat Server (0)
Wipro_Vikas This project is for Vikas from Wipro	99.5%	2	03/03/2015	
GSI Demo Its a Demo project to show case the feature functionality with other point tools to Customers	99%	7	04/17/2015	
arsenal-agile Workspace to provide an overview of TeamForge functionality utilizing svn and/or git as part of an agile development project using a waterfall requirements gathering process.	98.9%	38	05/05/2015	

Map teams to your organization
Give visibility across your teams

Integrate in your agile tool chain

Site Administration

SCM INTEGRATIONS	PENDING SCM INTEGRATIONS	PENDING SCM REPLICAS	SCM ACCESS REQUESTS	SITE-WIDE LINKED APPLICATIONS
NAME	DESCRIPTION			CATEGORY
Git	Git Integration			Git
Subversion				Subversion
Local office				

Site Administration

ICON	NAME	DESCRIPTION	STATUS
Orchestrate	Orchestrate App	Orchestrate App	Enabled
TestLink	Test Link	Test Link	Enabled
Review Board	Review Board	Review Board	Enabled
QC TF Landscape Cluster	QC TF Landscape Cluster integration	QC TF Landscape Cluster integration	Enabled
Binaries	This is the binary app which orchestrates all the integrated apps of the category binary		Enabled

Site Administration

APPLICATION NAME	URL	OPEN	ADMINISTER	DISABLE	ENABLE	DELETE	EDIT	CREATE
Orchestrate		New Window						
Jenkins	http://adopt-ctf.collab.net:8090/	Iframe						
Gerrit	http://adopt-ctf.collab.net/gerrit/sso/	New Window						
JIRA		Iframe						
Chef Server		Same Window						
Fed SVN		New Window						
Gerrit_Build		Delete	Edit	Create				

Site Administration

ICON	NAME	DESCRIPTION	DELETE	EDIT	CREATE
nexus	l10n.repositories.description				

Standardize your agile process template

Create Project

Create Project

PROJECT NAME.*

URL NAME:

If a URL name is not specified, a name will be generated from the project name.

DESCRIPTION.*

PROJECT TEMPLATE: None

DEFAULT PROJECT ACCESS: Private - Only project members can view this project.

PROJECT ACCESS EDITABLE: Yes

arsenal-agile / Project Home

Project Home

Project Dashboard

About This Project Template

TeamForge

arsenal-agile

Configure:

EDIT CONTENT

PROJECT HOME TRACKERS SOURCE CODE BUILD & TEST FILE RELEASES DOCUMENTS WIKI DISCUSSIONS REPORTS ORCHESTRATE REVIEW BOARD TESTLINK BINARIES GERRIT PROJECT ADMIN

arsenal-agile / Trackers / Board View

Iteration 1

Red

artf20202 (P4) Hours: 0
[sample] Epic Four Under Consideration
None

artf20198 (P1) Hours: 0
[sample] Epic One In Progress
Dan Adams

Iteration 1

All artifacts

artf22045 (P2) Points: 0
New feature to support FRB Integration In Progress
None

artf20202 (P4) Hours: 0
[sample] Epic Four Under Consideration
None

artf22046 (P2) Points: 0
New Feature Task Blocked
Rich Daniel(Locked)

artf36619 (P4) Points: 0

Iteration 2

Select a Team

artf20201 (P5) Hours: 0
[sample] Epic Five Under Consideration
None

artf20199 (P2) Hours: 0
[sample] Epic Two Under Consideration
None

artf20267 (P2) Points: 0
This is the 1st story In Development
Kevin Hancock

artf20200 (P3) Hours: 0

Configure:

EDIT CONTENT

LIST PLAN TRACK SEARCH TRACKERS

arsenal-agile / Project Home

PROJECT HOME TRACKERS SOURCE CODE BUILD & TEST FILE RELEASES DOCUMENTS WIKI DISCUSSIONS REPORTS ORCHESTRATE REVIEW BOARD TESTLINK BINARIES GERRIT PROJECT ADMIN

Plan, breakdown, elaborate, and link your work

Iteration 1 Open only ▾ 11 sec

PRIORITY	ARTIFACT ID	TITLE	ASSIGNED TO	STATUS	PLANNED FOR	EST	REM	ACT	≡	⌚	🔔
1 HIGHEST	artf20198	[sample] Epic One	Dan Adams	In Progress	Backlog > Release 1 > Iteration 1	0	0	0			
1 HIGHEST	artf20213	[sample] Story One	None	Under Consideration	Backlog > Release 1 > Iteration 1	0	0	0			
3 MEDIUM	artf2019	[sample] Task One	Iteration 1		All artifacts						
2 HIGH	artf20207	[sample] Story Two	Backlog Items		Not Started (0)	In Progress (3)	Completed (2)	Blocked (1)	Aborted (0)		
1 HIGHEST	artf20221	[sample] T Two	artf20202 (P4)	Hours: 0	artf36619 (P4) Hours: 0 another task for this item	artf2050 (P4) Hours: 0 Neew Task	artf22046 (P2) Hours: 0 New Feature Task				
4 LOW	artf20216	[sample] Task Four	artf20932 (P2)	Hours: 0	artf31176 (P4) Hours: 0 new task for this item	artf28784 (P2) Hours: 0 Demo Task No1					
			artf22468 (P1)	Hours: 0	This is yet another requirements						

arsenal-agile / Documents / Root Folder / Design / Document Details

Document Details (Active Version) EDIT / UPDATE

Document Name:	New Branding Presentation	Status:	Draft	
Document ID:	doc3486	Current Version:	1	
Description:	What's new in our branding	Size:	6.22 MB	
Version Comment:	Draft What's new Presentation	Lock:	Unlocked	
Version Created By:	Kevin Hancock - 06/22/2014 8:21 PM EDT			

VERSIONS **ASSOCIATIONS** 1 **REVIEW**

DATE	ASSOCIATION	POSTED BY	COMMENT	ASSOCIATION TYPE
01/22/2015	artf31175:color scheme	Kevin Hancock	new color scheme sample	Artifact
06/22/2014	post2080:Re: New Branding?	Kevin Hancock	Document with What's New	Discussion Post
06/23/2014	artf20266:This is a new requirement	Kevin Hancock	this is the branding affecting this requirement	Artifact

Traceability from idea to build

ASSOCIATIONS Trace associations

	4883 Phone App Build ✓ 21 ✗ 0 ⏷ 0
	10852 Phone App Repository Commit building the view [rvb:10850]
	10850 Phone App CodeReview Review of building the view
	AUTO-1629 Phone App Ticket Fix the widget

4883
Phone App Build

Build server reported on 05/15.

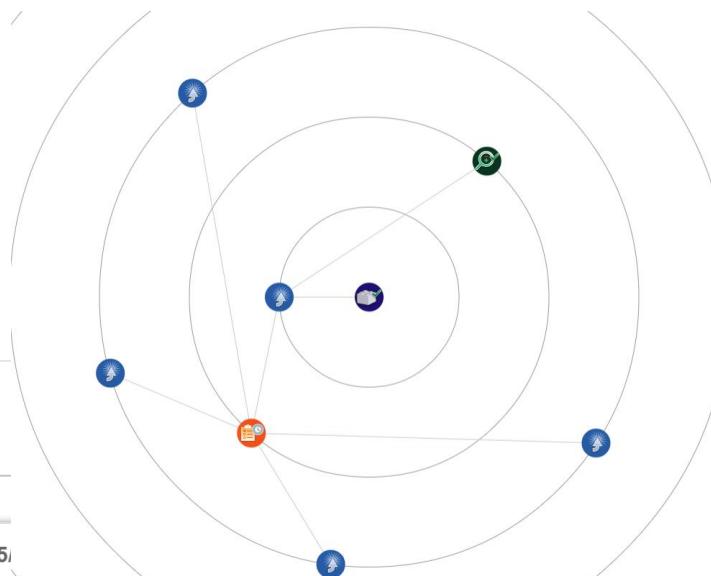
✓ Build Successful in 20 seconds.

TEST SUMMARY

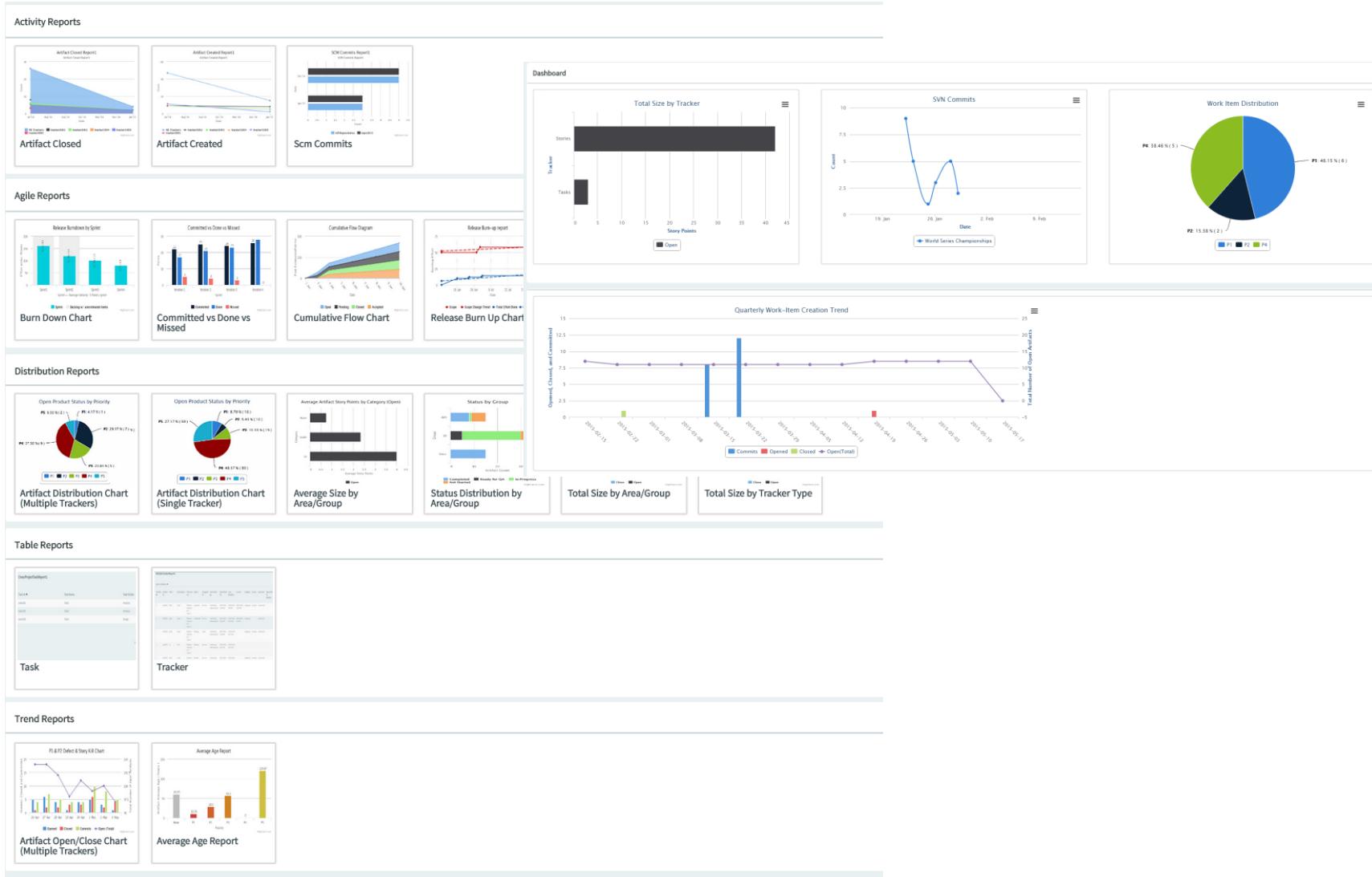
TEST RESULTS

BUILD SUMMARY

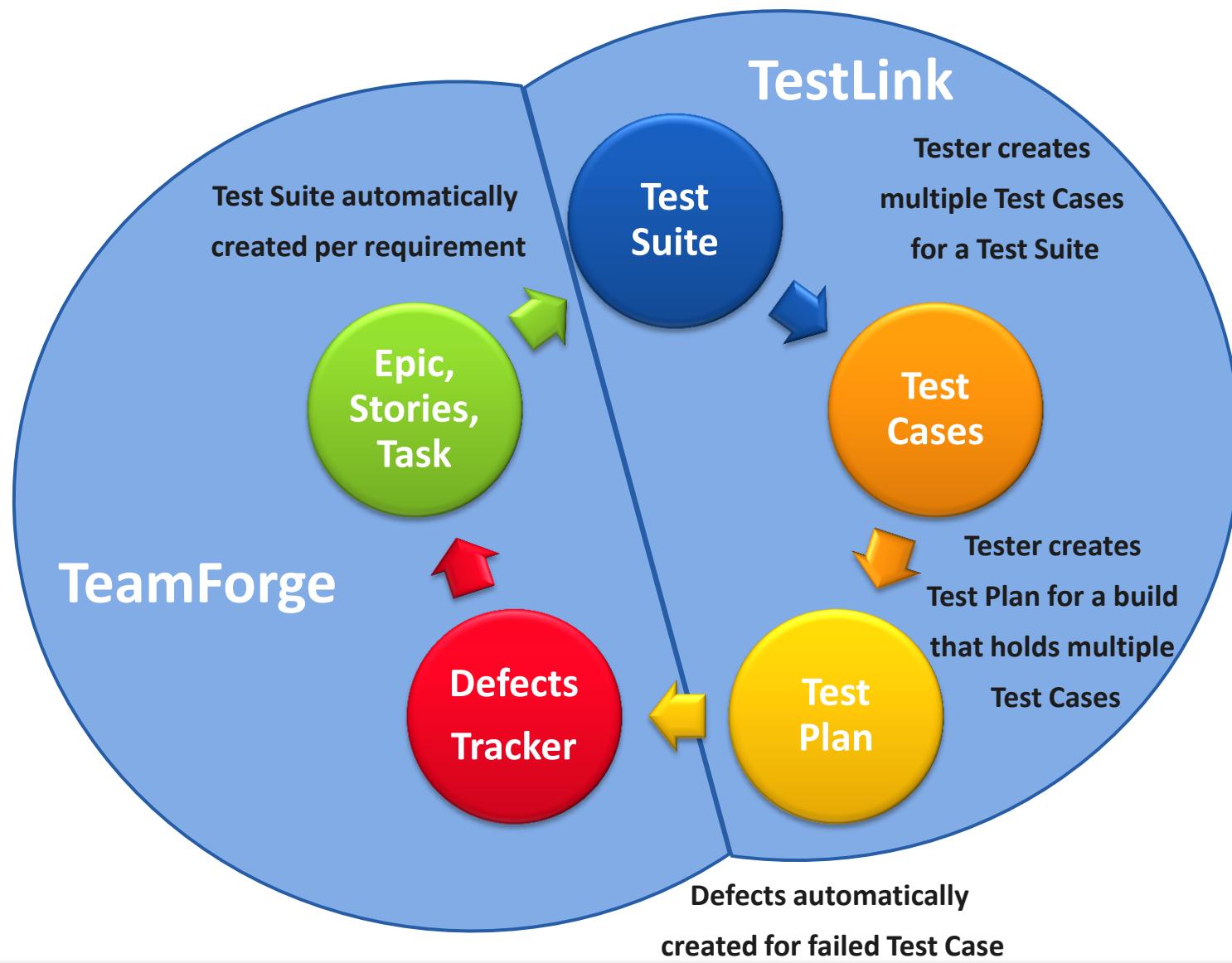
Add your comment



Visibility and Reporting across all teams



Link Testing to User Stories



Services, Training and Coaching

Agile and Certified Scrum Training and Coaching

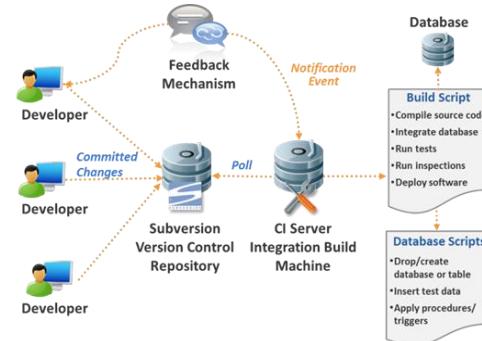
 Certified ScrumMaster	 PMI-ACP® Exam Prep Course	 Private Custom/Agile Training
 Certified ScrumMaster Experience (3 days)	 Agile and Scrum Essentials	 Free Agile e-learning
 Certified Scrum Product Owner	 Agile Coaching	

Workshops

SVN and Git Applied Workshops



Agile Development Applied Workshop



DevOps Applied Workshop



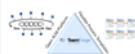
Enterprise Agility Assessment

The characteristics of the **Codify Dev Processes** dimension include organizational processes, technical practices and platform capabilities for the codification of agile approaches as well as the software development, continuous integration and release activities.

Enter the number grade that corresponds to your level of agreement with each question.

5
4
3
2
1

Question	Codify Development Process Dimension	Number grade	Process	Practice	Platform	Pillar
15	Definition of Done - Teams have developed and posted a definition of done that helps build quality into their releases.	2	x			
16	Pair Programming - Pair Programming is used by all development teams, Team Members work together (Pair or Swarm) on work items	1		x		
17	Test Driven Development - Every team practices Test Driven Development	4		x		
18	Coding Standards - A coding standard exists and is consistently used by all development team members	2		x		
19	Acceptance Criteria - Work items contain clear acceptance criteria in all cases	3		x		
20	Delivery - We deliver tested, production quality software each Sprint	4		x		
21	Process Codification - Our organization has an agreed upon and codified "set" of agile and mixed processes to drive standardization	4			x	
22	Agile Planning Tools - Teams utilize "dynamic planning" tools to capture epics, sprints, user stories, and tasks	4				



Open Platform
Process Template,
Community
Architecture

Assessment by
Process, Practice &
Platform

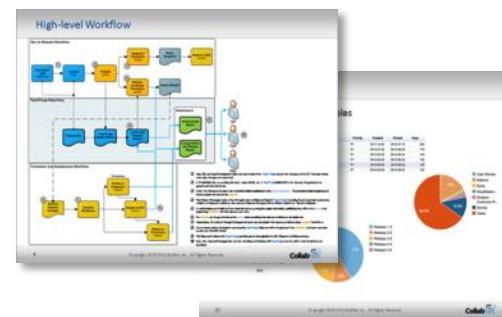
Demographics / Value Stream Mapping / S1 - Embrace Cloud / S2 - Comm Arch / S3 - Codify Processes / S4 - CD-DevOps / S5 - Leverage External Cloud / Project

Assessment by
Blueprint Steps

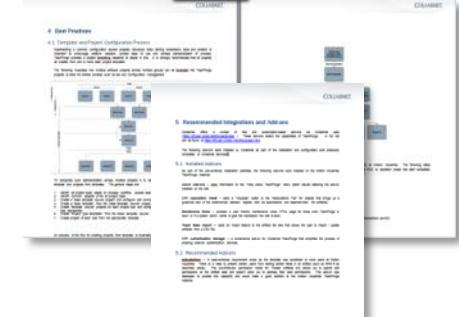
Findings & Recommendations



Presentations



Plans & Proposals



Questions

Next Steps

- Schedule an Enterprise Agility Assessment
- Schedule a session like this for your organization
- Schedule a TeamForge demonstration
- Sign up for [Certified Agile Training](#)
- Sign up for our next workshop on Hybrid Development
- Additional Resources
 - [Integrating Agile Planning through Software Delivery Across the Enterprise with CollabNet TeamForge®](#)
 - [The Executive's Guide to Enterprise Agile Adoption](#)
 - [Agile e-learning](#)