

User Experience, Agile and DevOps

Three Pillars of Digital Transformation

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Outline

- A Day in the Life Story
- The Three Pillars
- Stories of Modernizing
 - PBGC
 - USCIS
 - USPS
- Alternate Day in the Life Story

Day in the Life of a Government Worker

- Request Something
- Approve Something
- Schedule Something
- Assign Something
- Inspect Something
- Validate Something
- Review Something

Get it done,

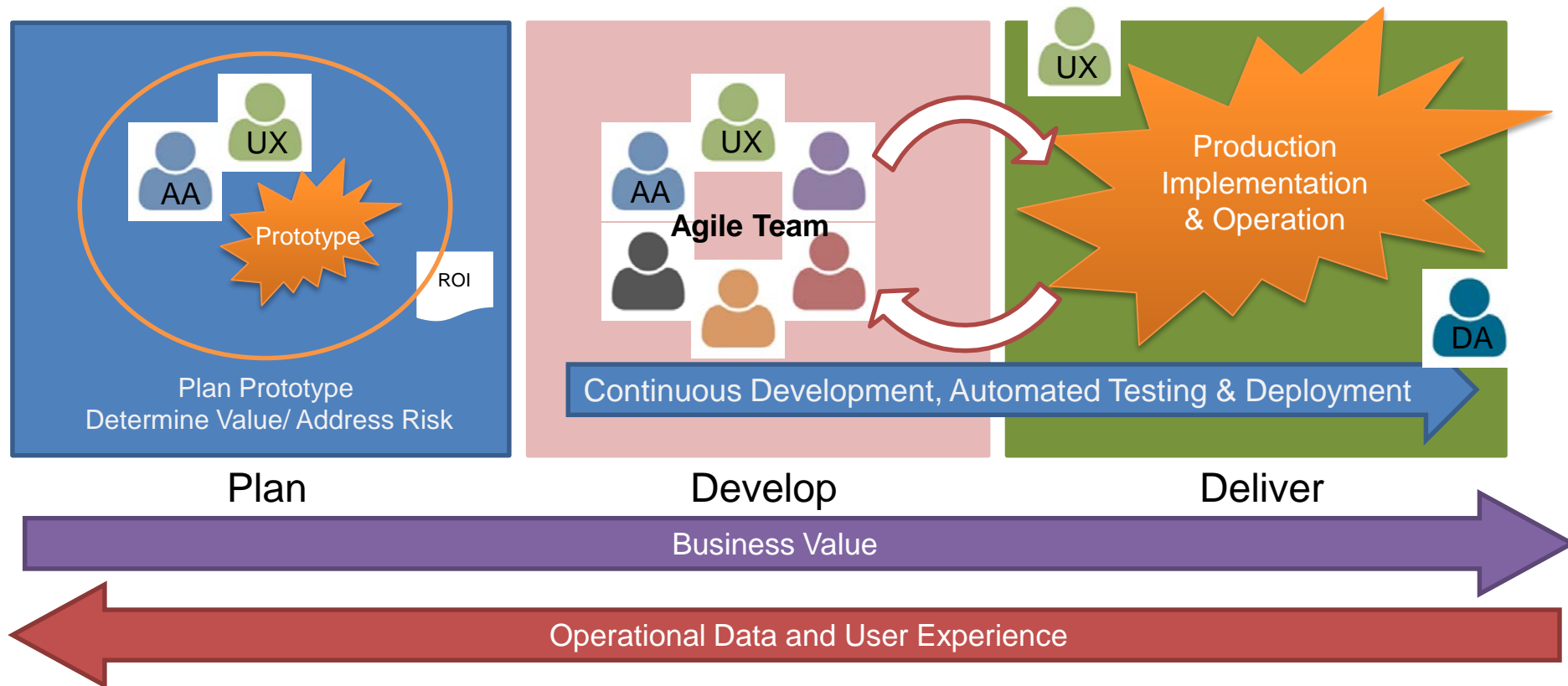
Get it done – Fast,

Get it done - Right

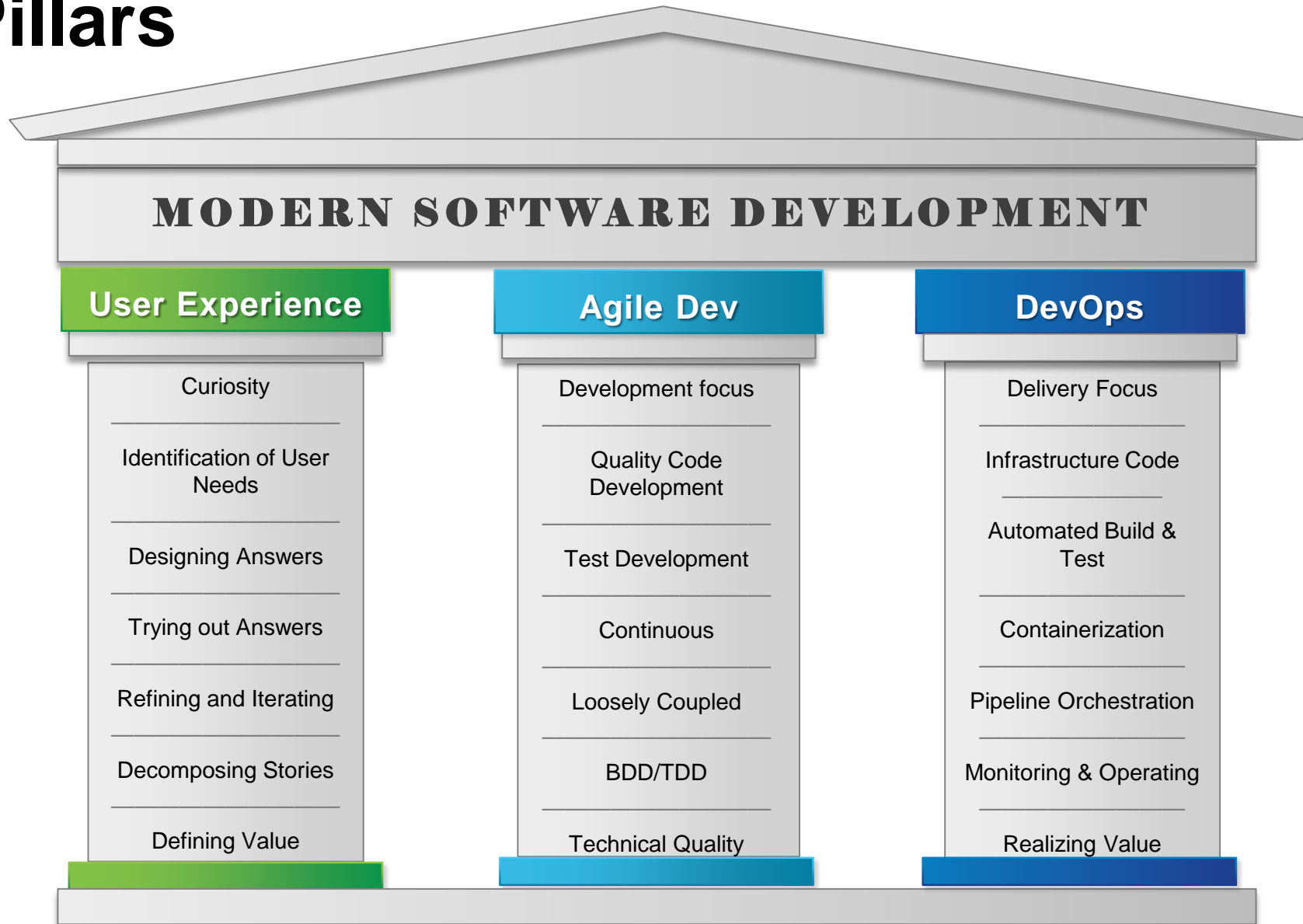
The Digital Services Approach

UX + Agile + DevOps

Rapid design/prototype phase followed by Agile development. Automatically tested and deployed. Operational data feeds back to the start of the process



Three Pillars



USPS – Agile to User Experience Design



Agile Success Leads to User Experience

- We initiated Agile
 - One Team conducted a pilot Agile delivery in 2010
 - Established the Standard practices for all projects
 - As teams adopted Agile on maintenance tasks the question was “How do we make incremental improvement in the software not just fix tickets?”
 - So we applied UX to one application...

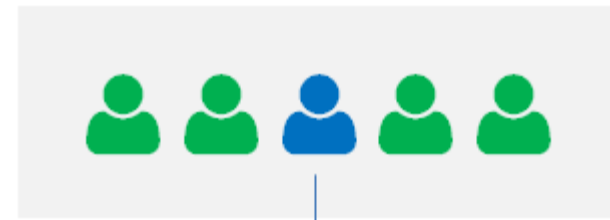
The Usability Test

1. Request access to a system
 - Fill out the request
 - Confirm the request
2. Check on status of the request
3. As a manager, approve a request

Measures

- Task Completion (Yes/No)
- Time on Task
- Number of Errors

5 users can find ~85% of usability issues

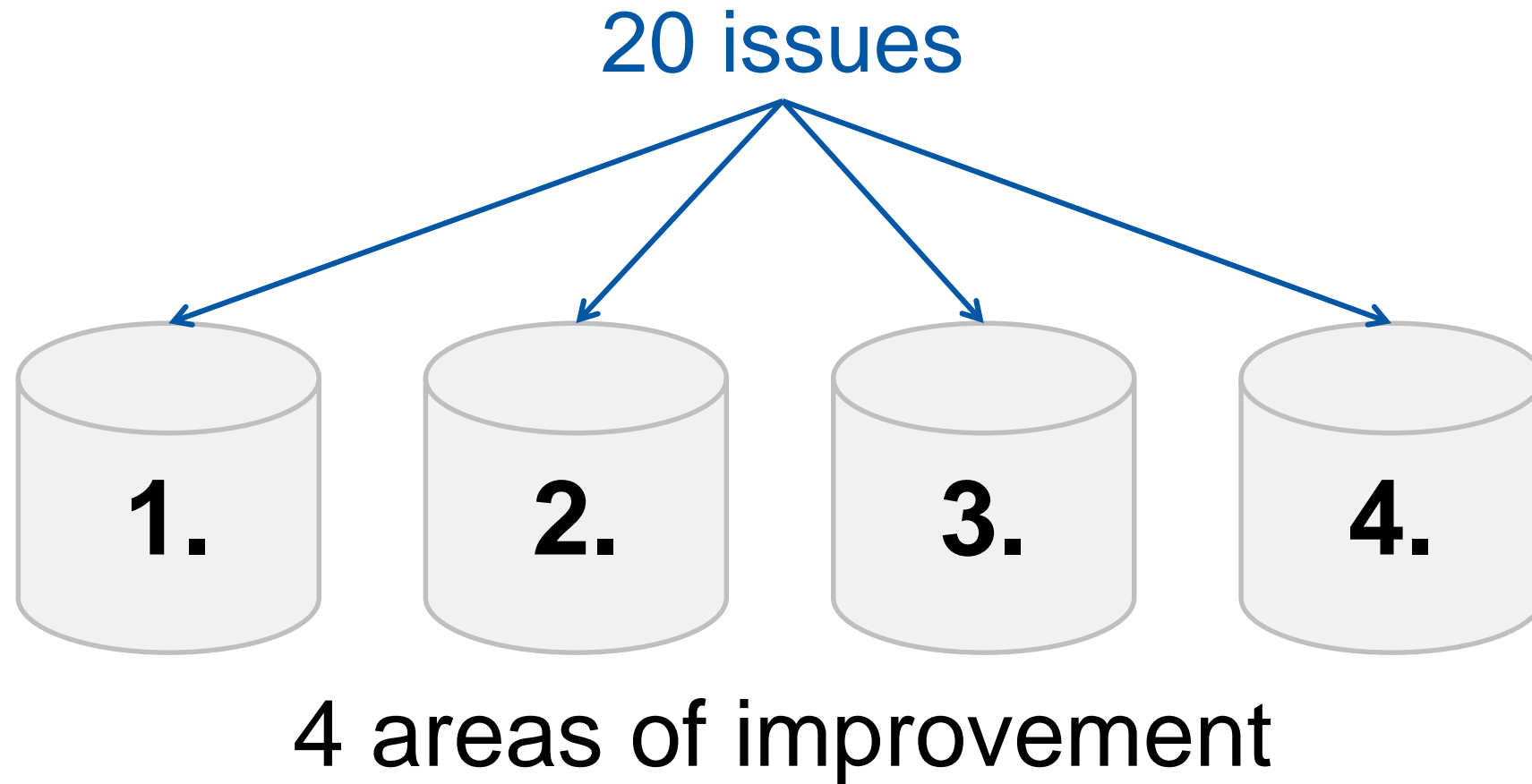


Five Participants, only participant 3 had used the System before.

Errors

	P1	P2	P3	P4	P5	AVG
Task 1 Request	0	3	0	3	-	1.5
Task 2 Check Status	1	3	1	4	-	2.25
Task 3 Approve	0	1	0	1	0	0.4

What We Found



Areas for Confirmation Screen Improvement

1. Design Standards?

- EVERYTHING IS BOLD AND BLUE
- Titling, labelling, help text, and feedback
- Consistency
- Using interface elements and design elements with intention

2. Functional Elements out of context *(Does the date here mean it will be done?)*

3. Streamline page layout and flow to improve understanding

4. Some data on the form is not represented..

5. About the buttons.

Confirming a request

[Home](#) > [Request Access Menu](#) > [Request Access](#)

[Help](#) [FAQs](#) [Log Off](#)

Your request is ready for final submission. Please review your request to make sure it is correct below. When you submit the request, it will be forwarded to the specified eAccess Manager for review and approval. Please click on a specific role under the "Assigned Roles" section to view the description.


User Information

User	UID	EID	User Type	Approving Manager	Request Date
NGUYEN, JIMMY	KGMND0	04009161	Postal	SABOL, JULIET A	03/13/2015

Request Summary for Request #5391548

Resource: PostalOne!

[Edit](#) [Delete](#)

Application/System	Action	FSC Approval	COR Approval	Date Needed
 PostalOne!	ADD	Y	N	13-MAR-15

3 Special Instructions

Additional Information

1 Are you requesting access to restricted Headquarters roles?	No
Do you only need report access?	No
Do you work with Business Reply Mail or Business Mail Entry?	No
Do you need access to e-VS/PRS	No
Do you work with Electronic Mail Improvement Reporting (eMIR)?	No
Do you work with District Business Mailer Support?	No

[Submit Request](#) [Cancel Request](#)

Detail assignment?

5

4

Confirming a request

1. Conform to web norms
2. Provide Context to data
 - Date Needed is in the context of the request
3. Clear layout and Flow
4. All data is represented on the form.
5. Button purpose is clear

Home > Request Access Menu > Request Access

Please confirm your request for **PostalOne!**



Are you requesting access to restricted Headquarters roles? **No**

Do you only need report access? **No**

Do you work with Business Reply Mail or Business Mail Entry? **No**

Do you need access to e-VS/PRS? **No**

Do you work with Electronic MailImprovement Reporting (eMIR)? **No**

Do you work with District Business Mailer Support? **No**

Date needed **March 13, 2015**

Special Instructions

Is this request associated with a detail assignment? **No**

When you submit this request, it will be forwarded to your eAccess manager, [JULIET A SABOL](#), for review and approval.

 Edit

 Submit

User	JIMMY NGUYEN
UID	KGMND0
EID	04009161
User Type	Postal
Manager	JULIET A SABOL
Action	ADD
FSC Approval	No
COR Approval	Yes
Request Date	3/13/15
Needed Date	3/13/15
Request ID	5391548

2

4

1

5

Faster Request Process

# of Users:	<input type="text" value="6,100"/>
Expected Project Life:	<input type="text" value="5"/> Year(s)
Days Per Year:	<input type="text" value="280"/>
Work Hours Per Day:	<input type="text" value="8"/>
Annual Salary:	<input type="text" value="51,017"/>
Increase in Efficiency:	<input type="text" value="30"/> secs ▼

Save 30 seconds in
the request process =
**\$1.4 million in 5
years**

PBGC – Agile Adoption to DevOps



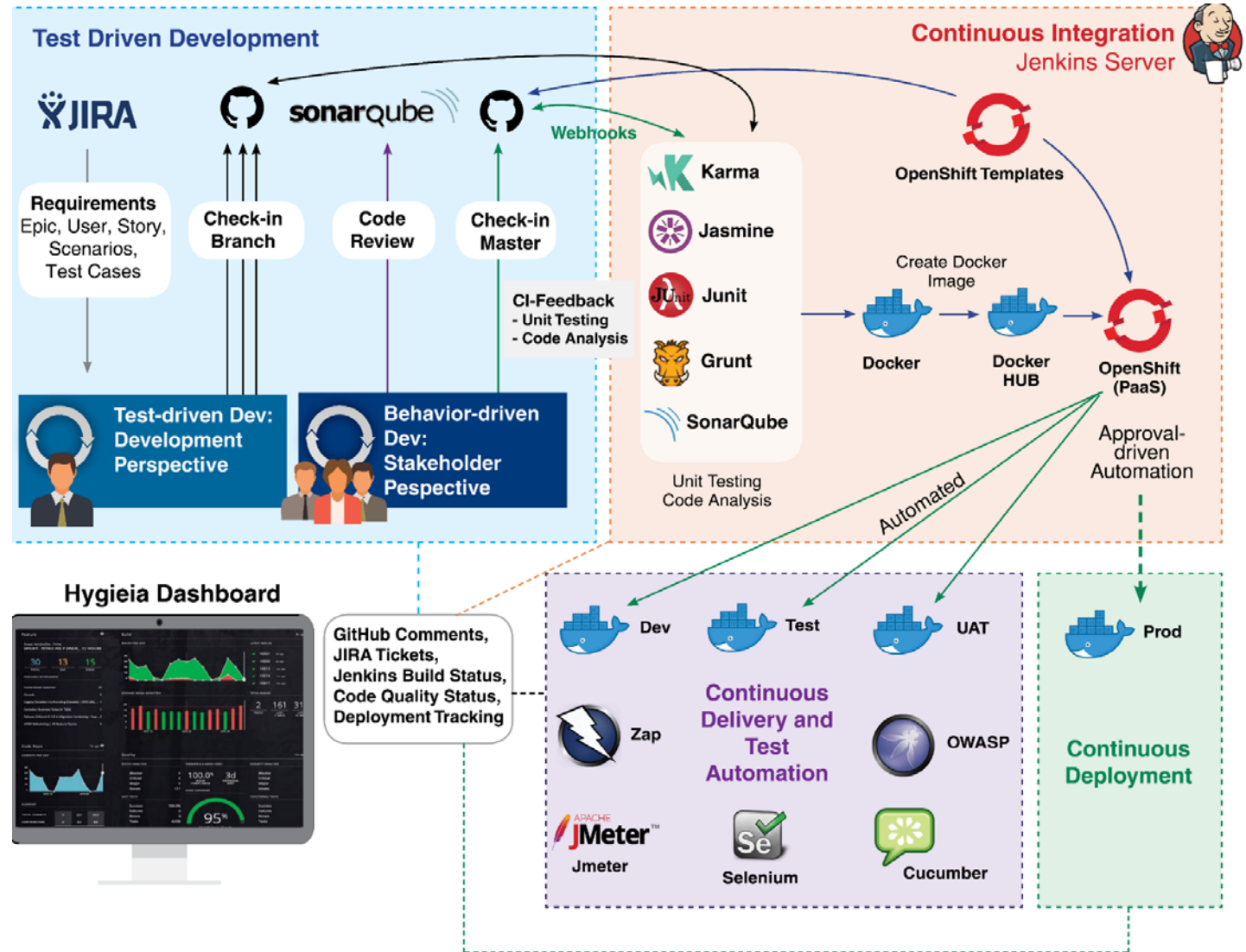
Agile Success Leads to DevOps

- We initiated Agile on one Project through
 - Training and Coaching executives in both IT and Business
 - Establishing the standard SAFe practice and method
 - As the team became more efficient the bottleneck became testing
 - Quality suffered as testing was taking too long and wasn't transparent
 - So we introduced DevOps Automation Tools...



Open Source DevOps Toolkit

- Primarily Open Source
- Deployable in many contexts
- Promotes Test Driven Development & Behavior Driven Development
- Transparent



Adaptable Frameworks



	Code Quality	Source Code Repository	Code Library Management	Performance Testing	Functional Testing	Security Scanning	508 Scan	Deploy
Base	Sonar	SVN	Artifactory	Jmeter	Selenium	Sonar / ZAP/ OWASP	aXE 508	Jenkins w Plugins
PBGC	Sonar	SVN	Artifactory	Jmeter	Selenium/ Cucumber	Sonar / ZAP/ OWASP	aXE 508	Jenkins w Plugins
USPS	Sonar Enterprise	SVN	Artifactory Enterprise	Jmeter	Selenium/ UFT	Sonar / Appscan	n/a	Jenkins and UrbanCode
USPTO	Sonar	GIT	Artifactory	Jmeter	Selenium			

Day in the Life Revisited

- Request Something
- Approve Something
- Inspect Something
- Validate Something
- Review Something

Get it done, Get it done – Fast, Get it done - Right