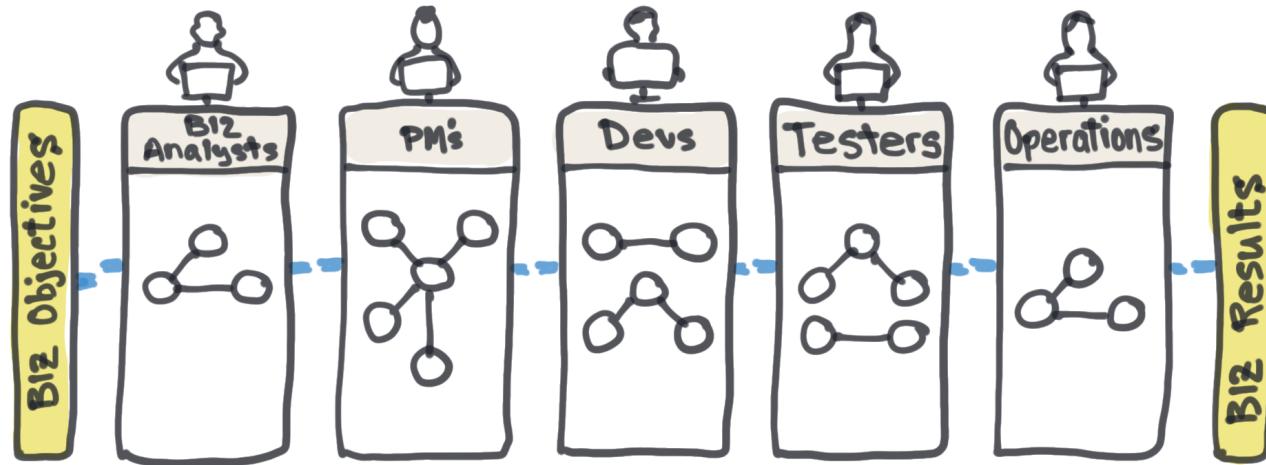


Making Connections Visible: How to Defrag your Value Stream

DEVOPS
ENTERPRISE
SUMMIT

Las Vegas
October 22-24, 2018



Dominica DeGrandis
Director, Digital Transformation



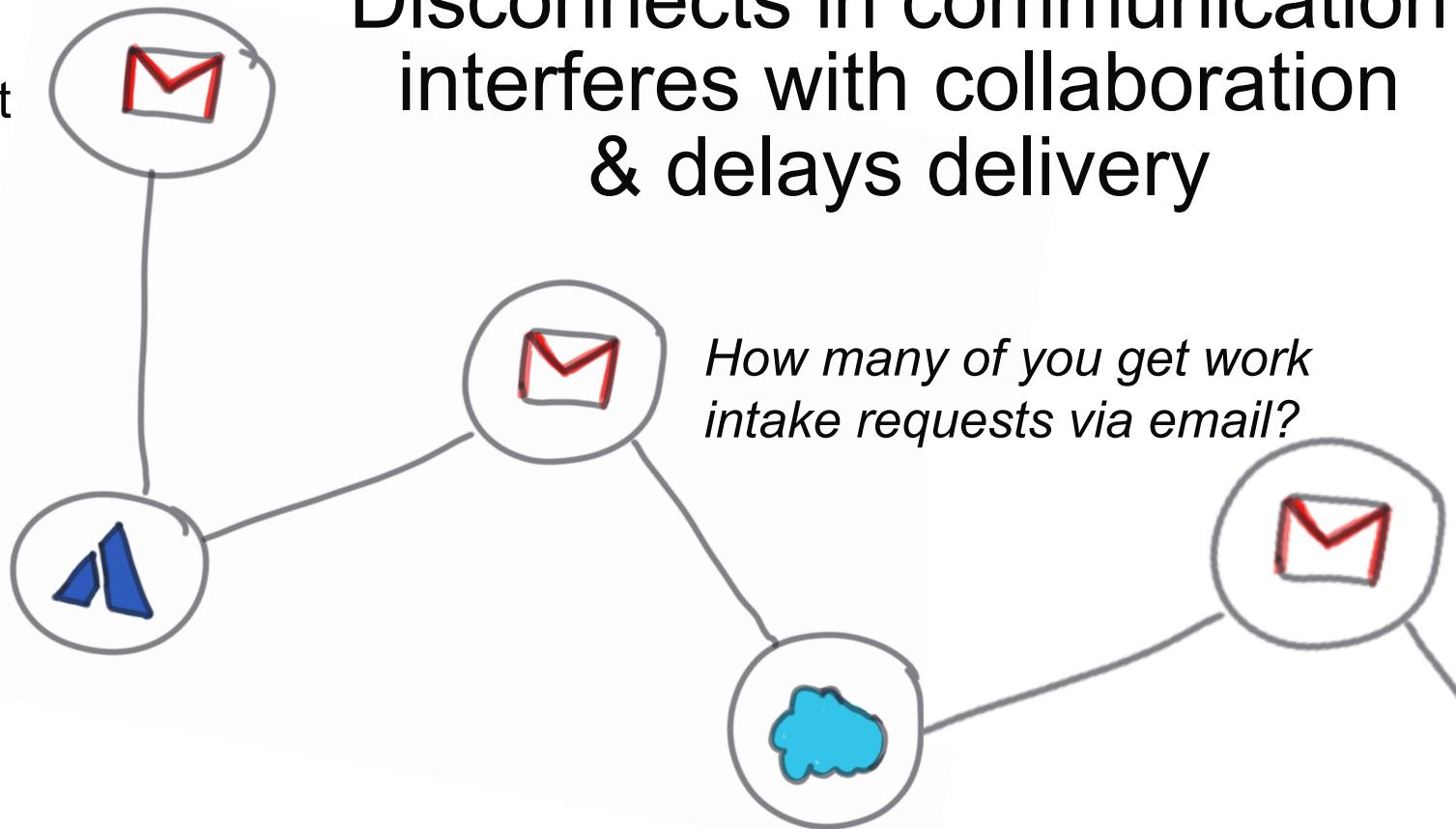
3 THINGS CUSTOMERS GRUMBLE ABOUT



- Things takes too long
- The progress of work is invisible
- Key info lost during handoffs

work request

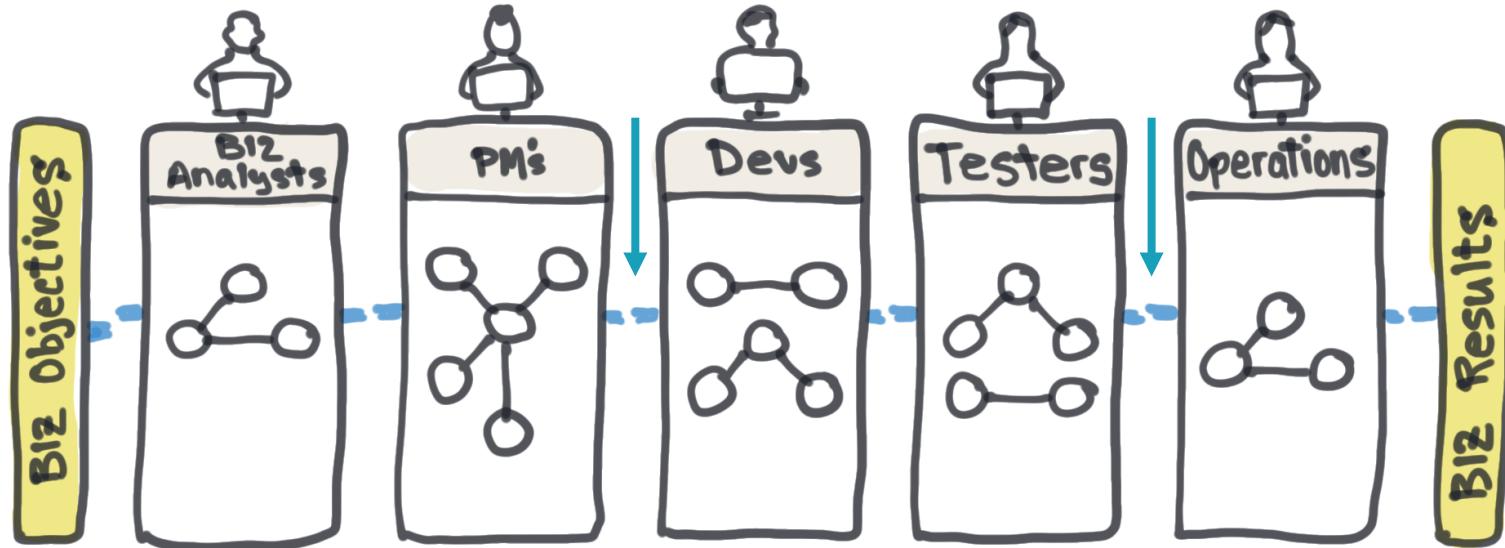
Disconnects in communication interferes with collaboration & delays delivery



“Things take too long” is a universal problem

WHAT'S THE POINT?

A defragged value stream improves **flow**



The hardest thing we do is **communicate** across teams.

Value Stream: all activities done to plan, design, build & deliver items that provides biz value



Flow is the 1st way of DevOps

- Make work visible
- Limit WIP
- Reduce batch size

Flow: value pulled thru a value stream smoothly & predictably

Key point #1

Complexity drives
necessary specialization



Primary care physician is the first stop.

- Speech therapist
- Physical Therapist
- Occupational therapist
- Neurologist

Hand splint and positioning in place improves
handwriting



Essential Complexity

Heterogeneity (diversity) that improves the flow of business value by supporting the needs of specialized stakeholders.

"The complexity of software is an essential property, not an accidental one. Hence, descriptions of a software entity that abstract away its complexity often abstracts away its essence." Fred Brooks. (Author - The Mythical Man Month)

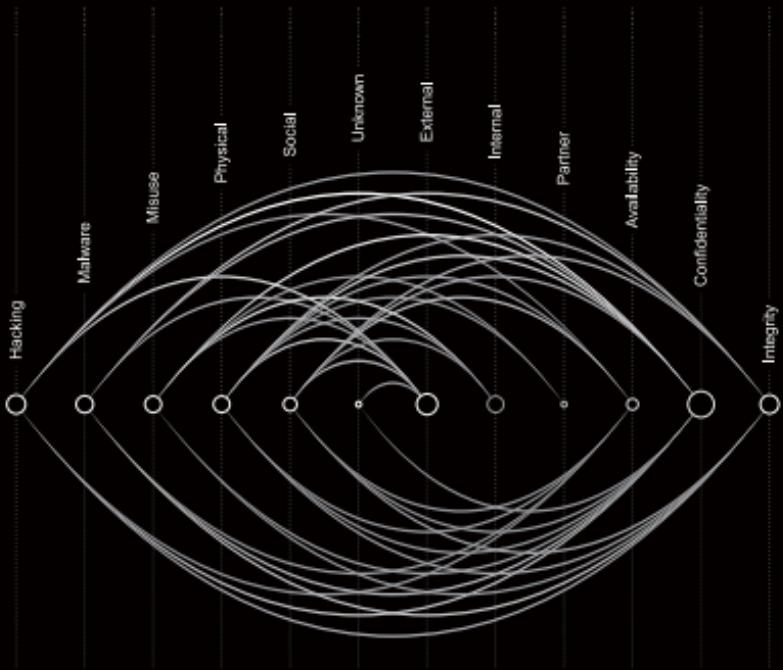
The PCI Audit



- Project manager calls weekly meeting to “coordinate” the work.
- PM doesn’t understand all the technical details.
- Developer doesn’t have visibility into live app attacks in the security tool
- Storage engineer doesn’t see the vulnerabilities in network devices.

2018 Data Breach Investigations Report

Executive summary



verizon[✓]

<https://www.verizonenterprise.com/resources/reports/>

15

Number of incidents and breaches by sector

Accommodation

338 breaches **368** incidents

Education

101 292

Financial

146 598

Healthcare

536 **750**

Information

109 1,040

Manufacturing

71 536

Professional

132 540

Public

304 **22,788**

Retail

169 **317**

0 200 400 600 800 1000

2,216

Allocate capacity for security

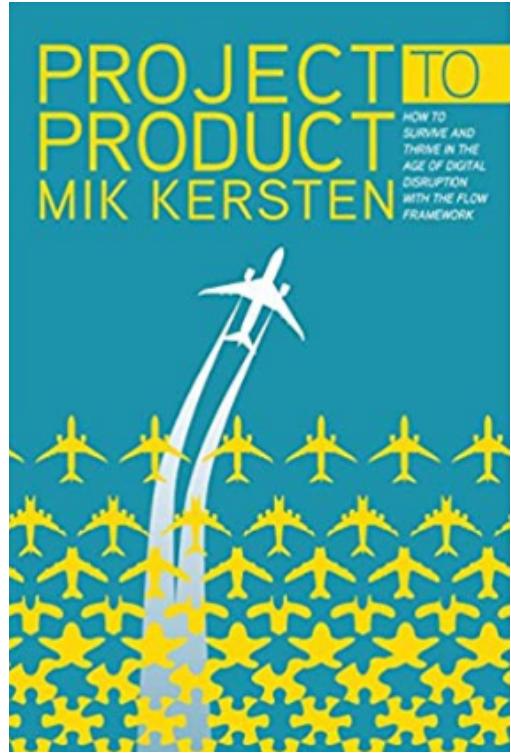
DevSecOps Community Survey results



of developers don't have enough time to
spend on security.



agree that security is part of everyone's
role.



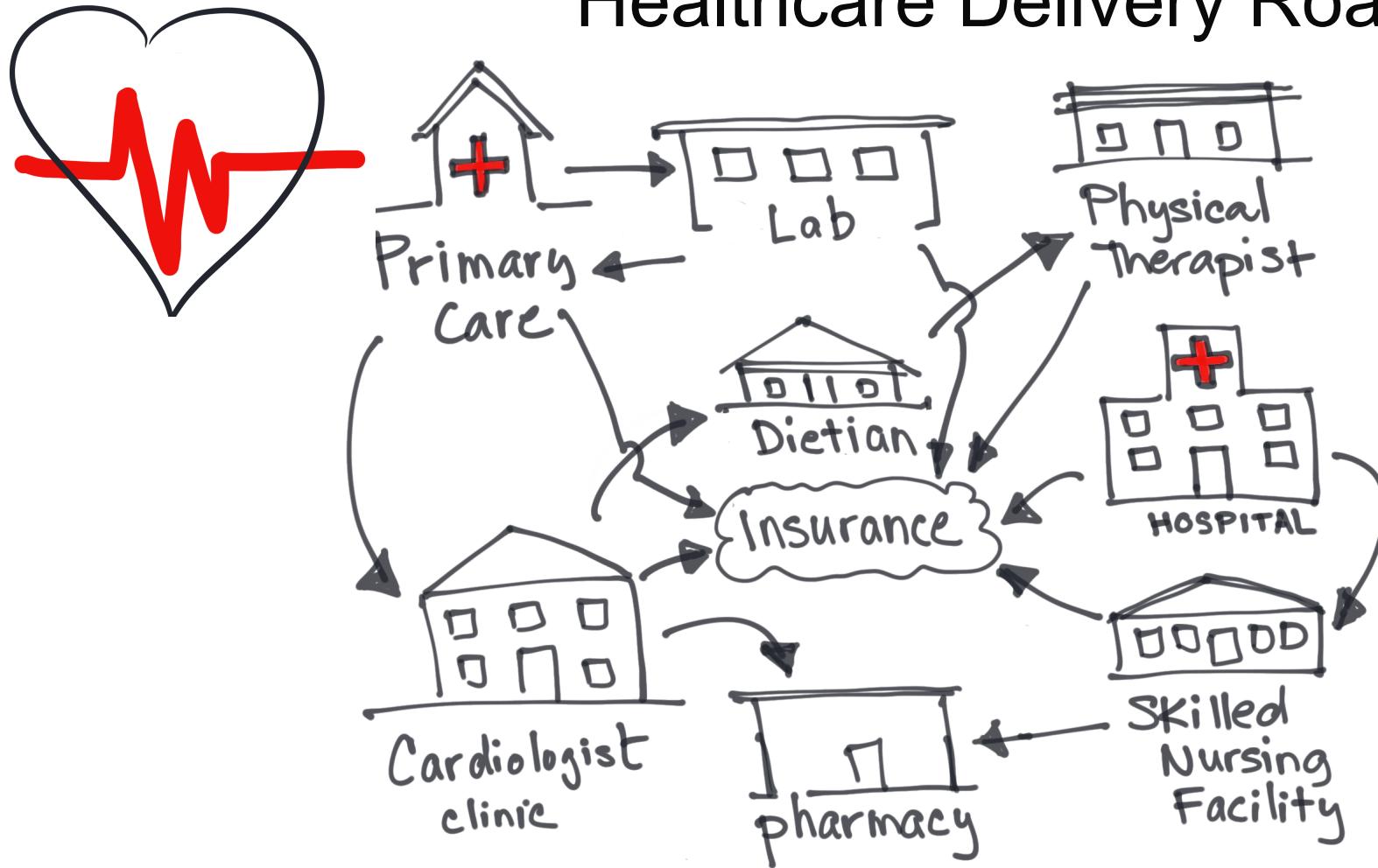
“The more we scale, the more we need specialized people. The growing division of labor in IT results in the specialization”

~ Mik Kersten

Key point #2

Specialization causes
expensive disconnects

Healthcare Delivery Roadmap



Healthcare costs from disconnect workflow

Adenosine* heart stress test



Dr's orders: "No caffeine 24 hours prior to test."

Nurse: "Would you like some coffee?" oops!



Pharmacy tech handed nuclear medicine tech wrong stuff.
Instead of heart tracker injection the Dr ordered, my mom
was injected with a bone tracker.

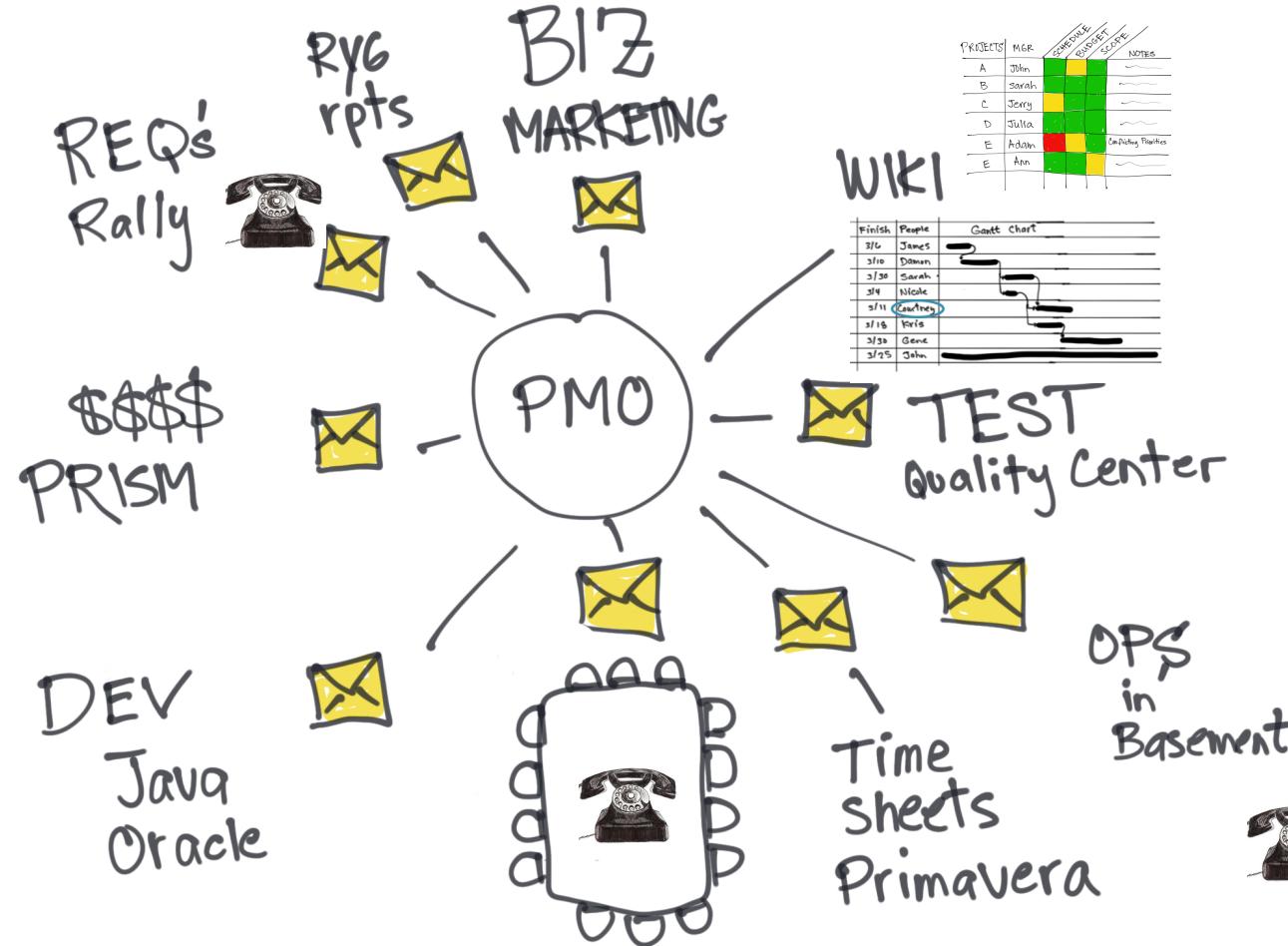
oops!

US medical errors cause > 250k deaths/yr, 3rd leading cause of death

* pharmaceutical used to assess blood flow to the heart.

https://www.hopkinsmedicine.org/news/media/releases/study_suggests_medical_errors_now_third_leading_cause_of_death_in_the_us

Software Delivery Roadmap





IT costs from disconnected workflow

- Unhappy employees
- Unhappy customers
- Things take too long
- Inaccurate data
- Bad estimates

Cost center or profit center?

Key point #3

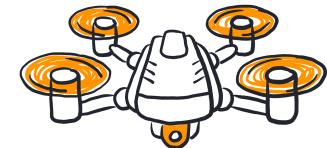
If you don't address problems related to complexity & specialization someone will exploit it. It's already happening.

Healthcare Disruption

Jan. 30. Amazon announces collaboration with Berkshire Hathaway & JPMorgan to launch a company aimed at **cutting healthcare costs** for their U.S. employees. Shares of other healthcare companies plummet shortly after the announcement.

Feb. 13. Sources familiar with Amazon's plans say it is pushing to turn its medical supplies business into a major supplier to U.S. hospitals and outpatient clinics. The idea is to establish a **one-stop-shop** for health systems.

March 21. The U.S. Patent and Trademark Office grants Amazon a new patent for a delivery drone that can respond to human gestures. This is not Amazon's only patent to expand its air delivery service. Experts say this delivery service may **disrupt supply chains across all industries.**

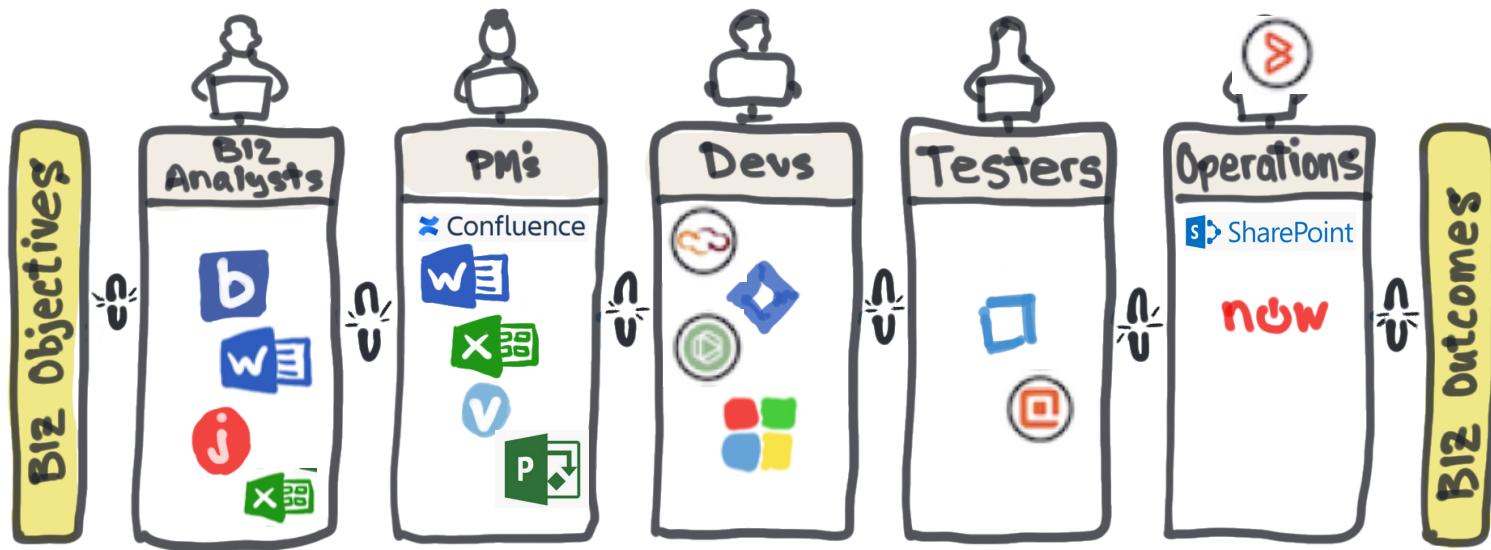


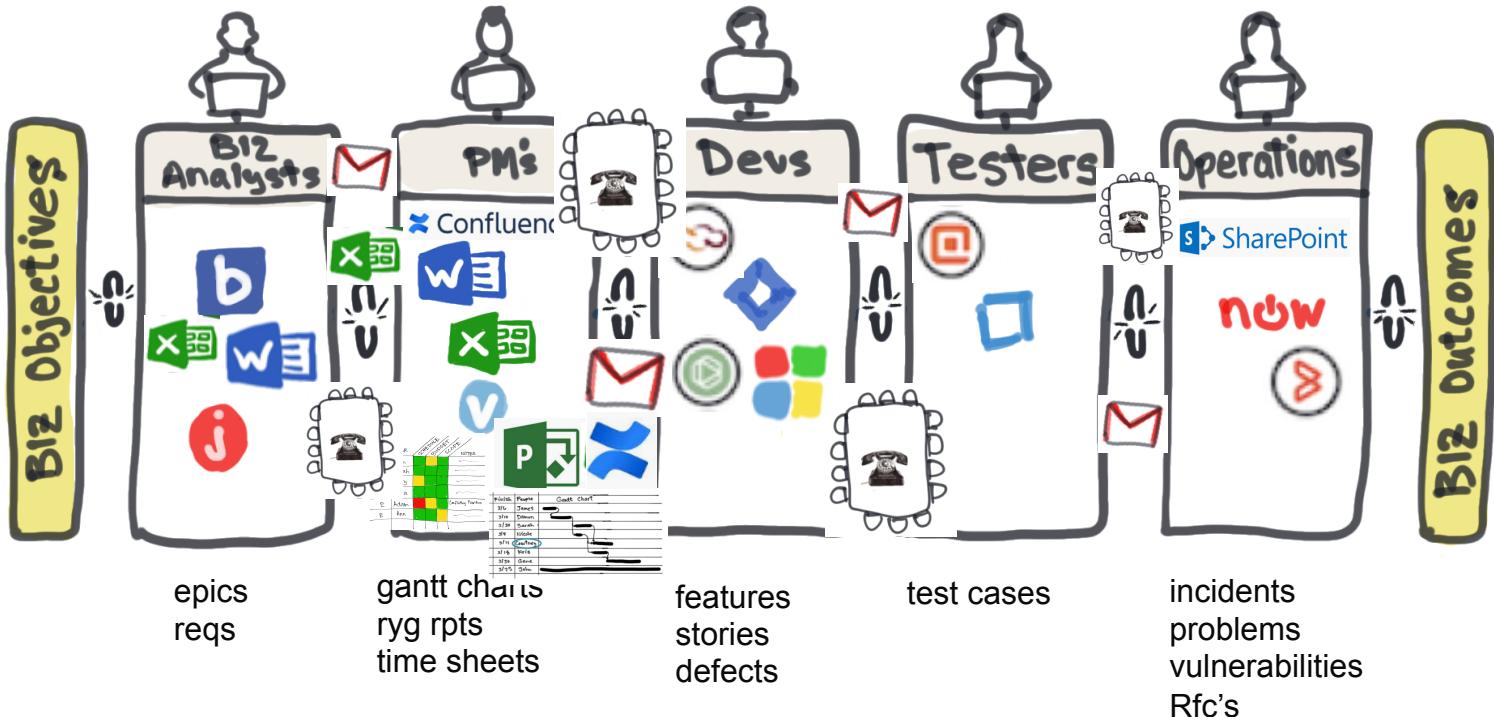
Technology Disruption

PERIODIC TABLE OF DEVOPS TOOLS (V2) (V1)																		
L	Rn	Gh	Github	Os	Open Source	F	Free	Scm	SCM	Dm	Database Mgmt.	B	Build	Ch	En	I	Er	
S	Ox	Gt	Dm	Pm	Premium	R	Paid	Rpmgt	Repo Mgmt.	Ps	Testing	C	Testing	Pu	Pu	En	Os	
Ca		Dm	DDMastro	En	Enterprise	D		Deployment	Config / Provisioning	Sl	Containerization	A	Anable	An	Si	Si	Dk	
Li	Re	Li	Os			Cl		Cloud/IaaS/PaaS	Release Mgmt.	Co	Collaboration	S	Salt	Docker	Cs	Os	Rn	
Bb		Bb	Lb			Bi/Monitoring		BI/Monitoring	Logging	Sec	Security	Ch	Chef	Puppet	Bl	Az	Az	
Buckets		Lifecycle		Tools		Os		Fn		Se		Ga		Dh		Tr		
Gt	Rg	Mv	Gr	At	ANT	Fn	FitNesse	Se	Selenium	Ga	Gating	Dh	Jn	Ba	Tf	Rk	Aws	
Gl	Rg	Rg	Haven	Grade		Fn		Se		Ga		Dh	Jn	Bamboo	Va	Tem	Amazon Web Services	
St	Ox	St	Br	Gr	Ant	Fn	FitNesse	Se	Selenium	Ga	Gating	Dh	Jn	Ba	Tr	Rk	Azure	
Sv	Dt	Gt	Gp	Br	Cu	Cj	Cucumber	Qu	Qu	Npm	Npm	Cs	Vs	Cr	Gc	Gc	Google Cloud Platform	
Subversion	Darcs	Grunt	Gulp	Broccoli	Cucumber	Cucumber	Cucumber	Qunit	Qunit	npm	npm	CodeShip	Vsual Studio	CircleCI	SmartFog	Concur	Lxc	Rackspace
Xs	Xs	Xs	Br	Gr	Br	Cu	Cj	Qu	Qu	Npm	Npm	Cs	Vs	Cr	Gc	Gc	Linux Containers	
Hx	Dp	Sb	Mk	Ck	Jt	Jm	Tn	Ay	Ay	Tc	Tc	Cp	Ju	Rd	Cf	Ds	Rs	
He	Depth	git	Make	CHash	JUnit	jMeter	TestNG	Artifactory	Artifactory	TeamCity	TeamCity	Capistrano	JuJu	Rundeck	CFEngine	Swarm	OpenStack	
75	Re	76	Re	77	Os	78	Os	79	Os	80	Os	81	Os	82	Os	83	Os	
Cw	Id	Msb	Rk	Pk	Mc	Xltv	Jm	Nx	Nx	Co	Ca	So	Xld	EB	Dp	Ud	Fl	
SPW	Ident	MSBuild	Role	Power	Mocha	XLTView	Jasmine	Nexus	Nexus	Continuum	Continuum	Soloan CI	XL Deploy	ElasticBox	Deploybot	UrbanCode Deploy	OpenShift	
91	Er	92	Er	93	En	94	En	95	En	96	En	97	En	98	En	99	En	
Xlr	Xl_Release	Ur	UrbanCode Release	Bm	BMC Release Process	Hp	HP Coder	Au	Automate	Pl	Putout Release	Sr	Serial Release	Tfs	Tr	Rf	Pv	
106	Os	107	Os	108	Os	109	Os	110	En	111	Os	112	En	113	En	114	Os	
Ki	Nr	Ni	Zb	Dd	EI	Ss	Sp	Le	Sl	Ls	Gr	Sn	Tr	Fd	Sl	Sn	Sn	
XebiaLabs																		
Deliver Faster																		
Follow @xebialabs																		

91	Er	92	En	93	En	94	En	95	En	96	En	97	En	98	En	99	En	100	Re	101	Fm	102	Fm	103	Fm	104	Pt	105	En
Xlr	Xl_Release	Ur	UrbanCode Release	Bm	BMC Release Process	Hp	HP Coder	Au	Automate	Pl	Putout Release	Sr	Serial Release	Tfs	Tr	Jr	Rf	Sl	Fd	Pv	Sn	Sn	Sn	Sn	Sn	Sn	Sn		
106	Os	107	Os	108	Os	109	Os	110	En	111	Os	112	En	113	En	114	Os	115	Fm	116	Os	117	Os	118	Os	119	Os	120	En
Ki	Nr	Ni	Zb	Dd	EI	Ss	Sp	Le	Sl	Ls	Gr	Sn	Tr	Fd	Sl	Sn	Sn	Sn	Tr	Ff									

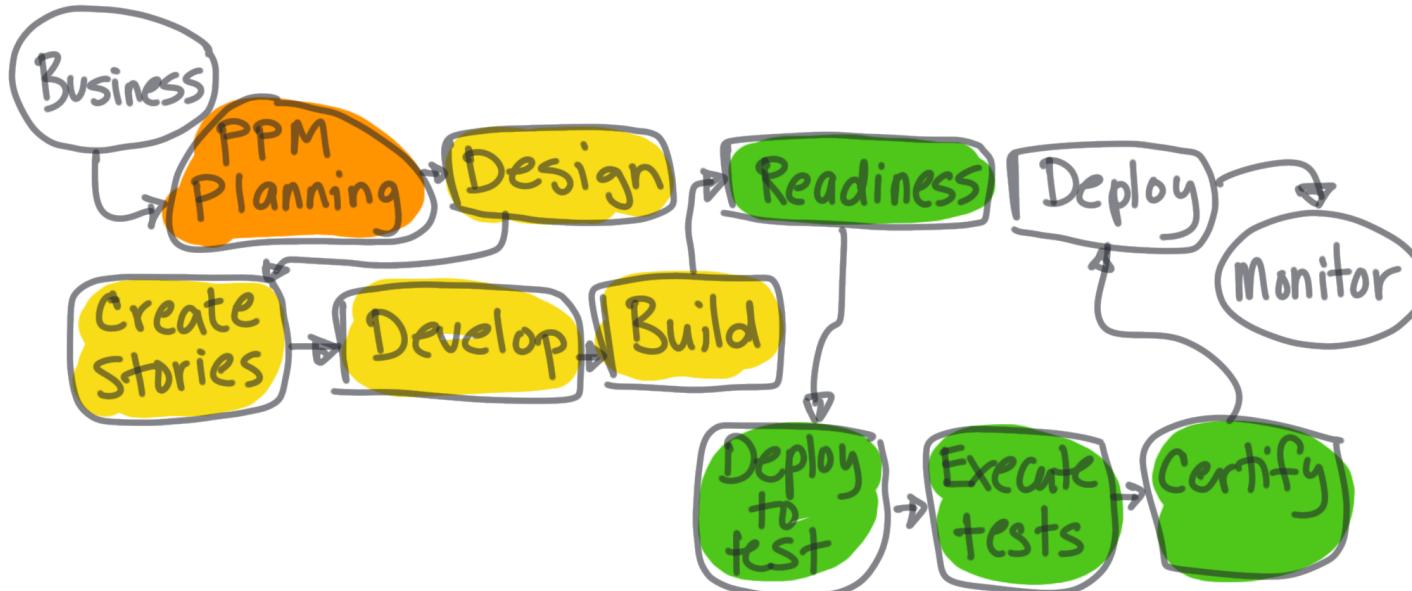
The reality of the situation



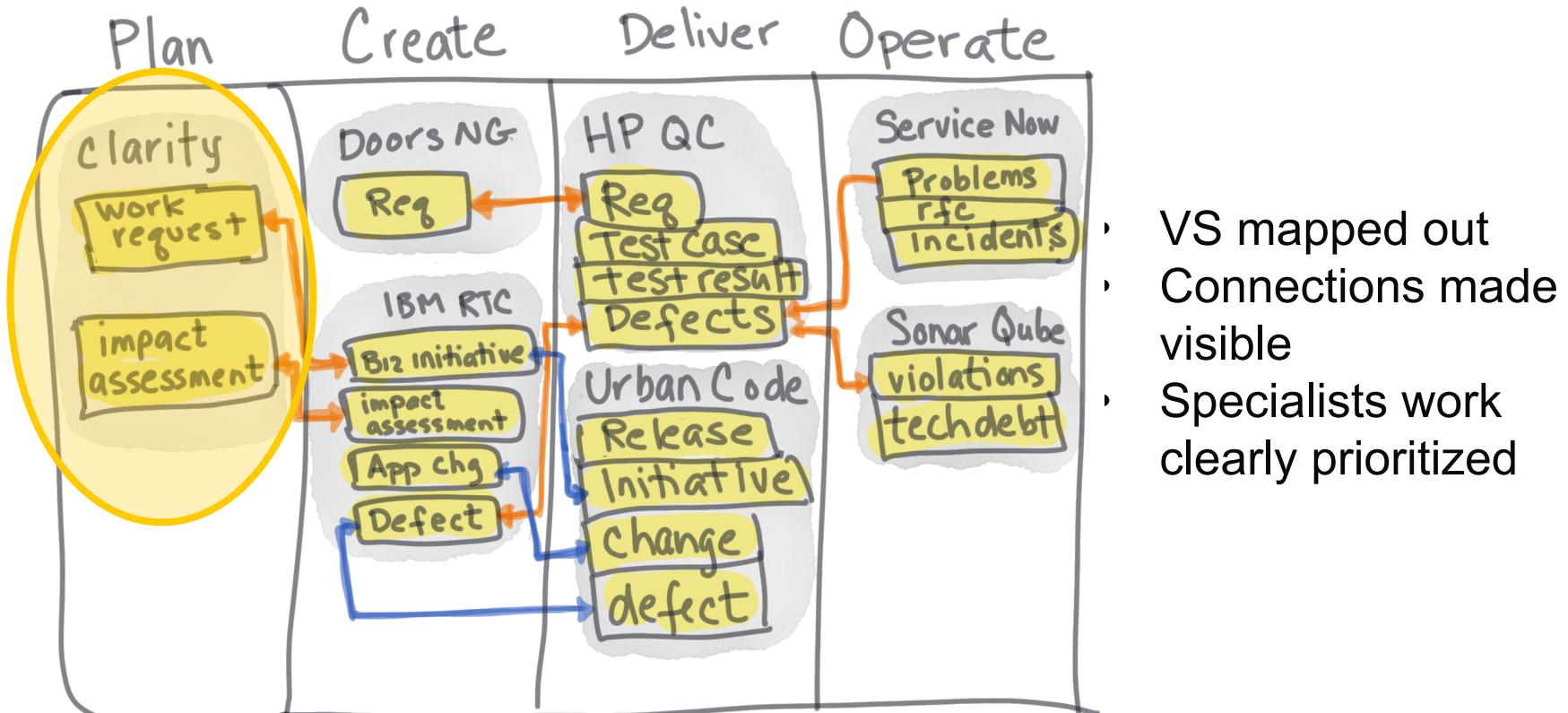


“Tool confusion fights occur due to inability to share knowledge, understand work capacity and improve workflow.” - Scott Prugh

Fortune 100: 34k employees, \$200+ billion in total assets



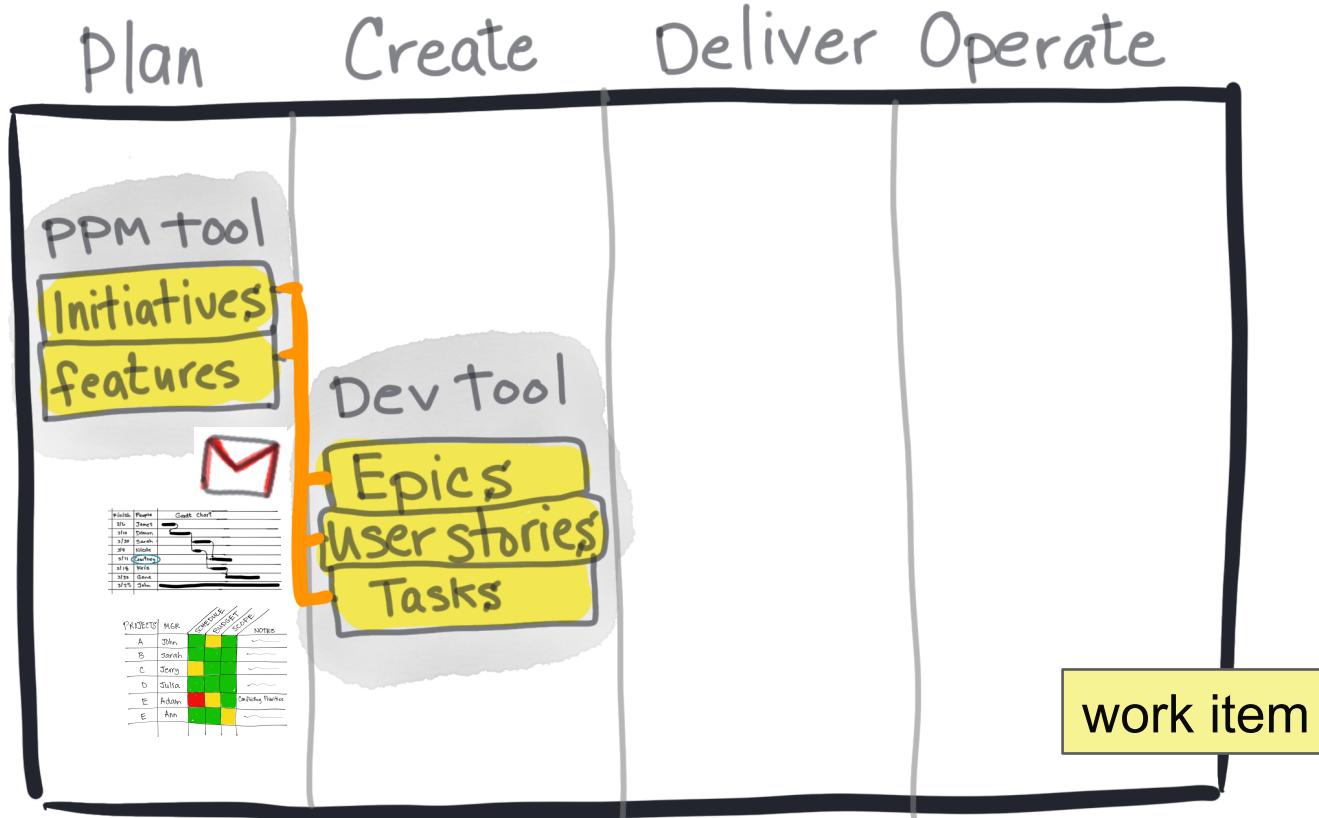
Flow of info across diff teams work management systems was **slow**. Hard to collaborate - created overhead & errors during handoffs.



8 weeks cut out of software delivery Flow Time

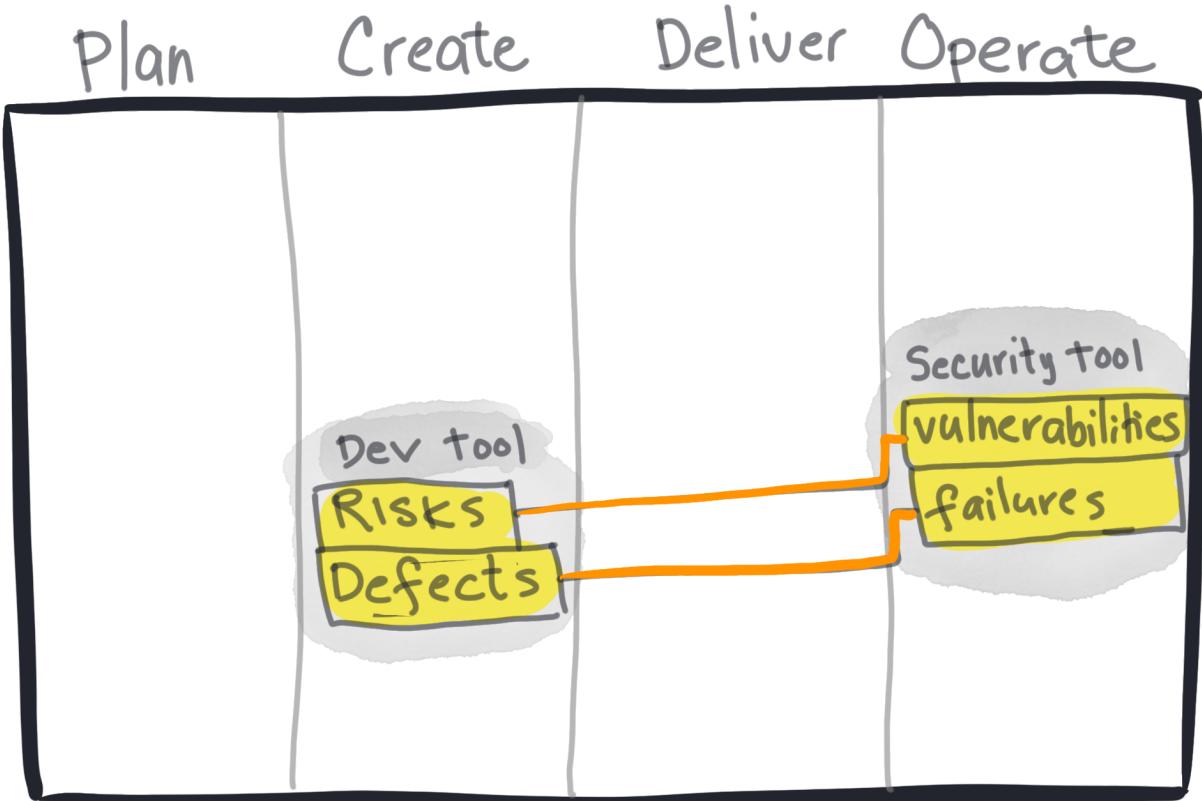
Pay attention to expensive handoffs: Project & Portfolio Management & Dev

Synchronize features & reqs from PPM to Dev planning.

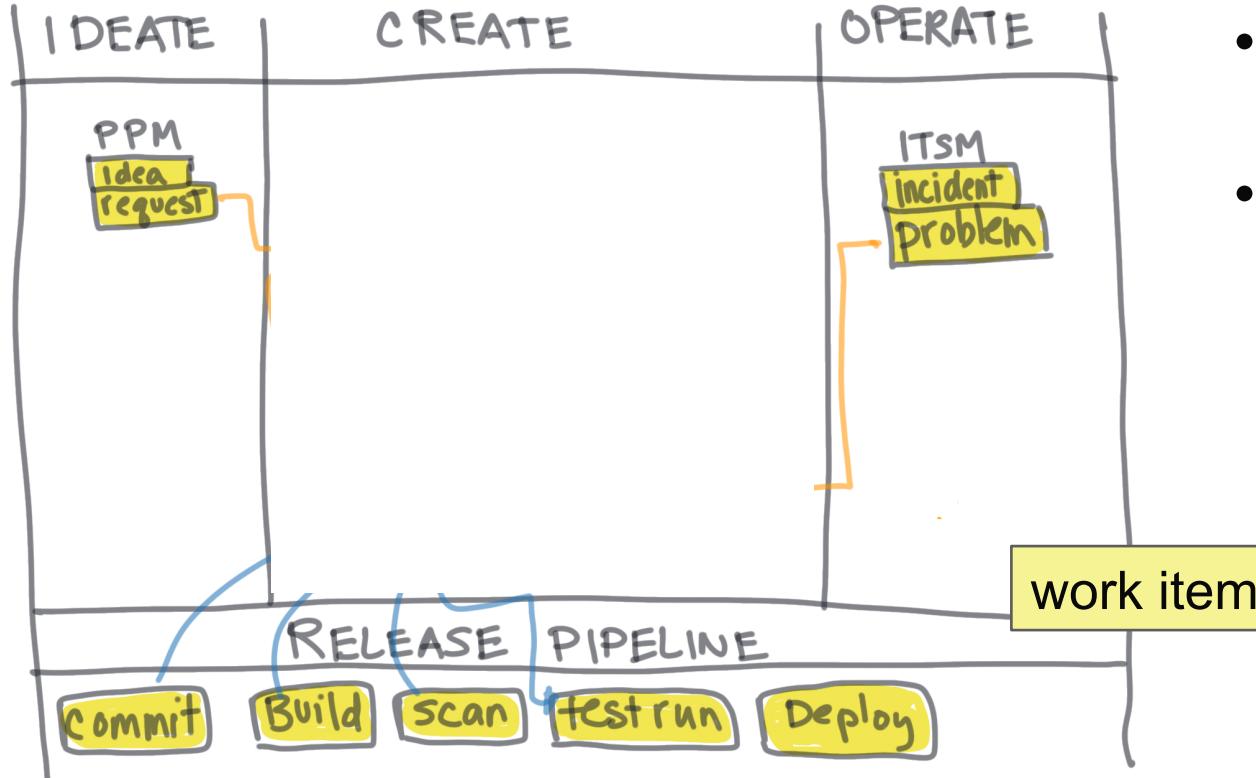


Pay attention to important handoffs: Security & Dev

Synchronize
info in
vulnerabilities
and failures
from security
directly to Dev.

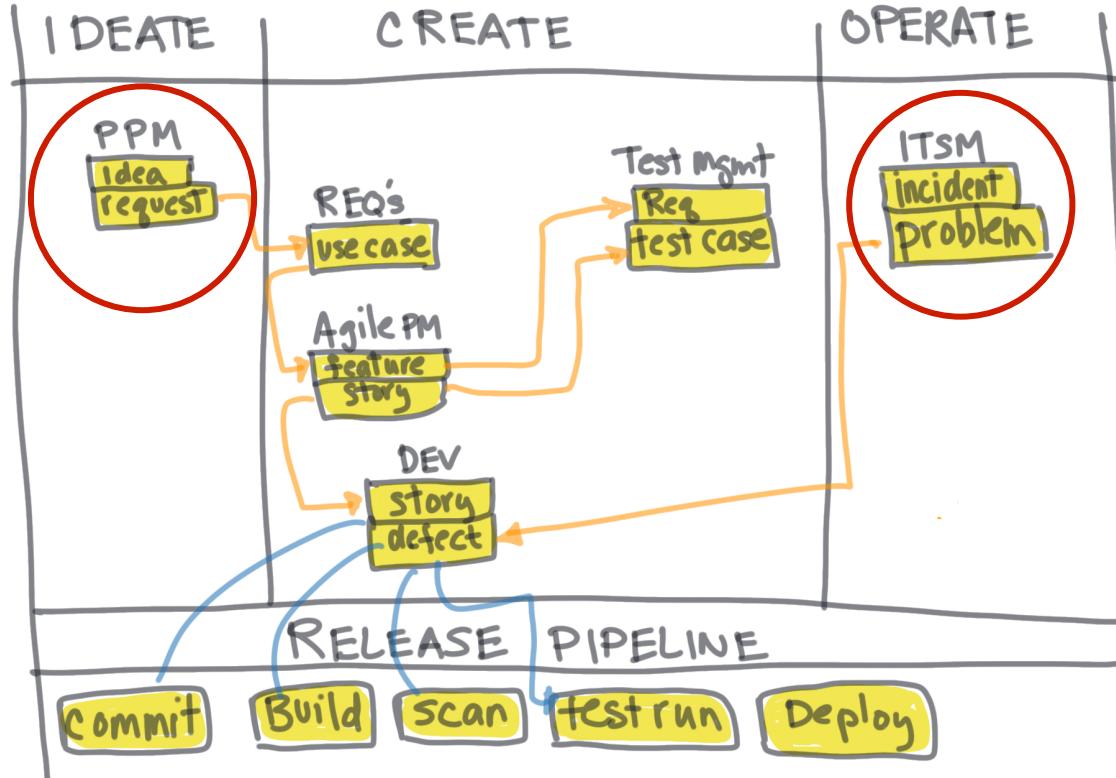


Make Connections Visible



- Connect the dots
- Start with 2–3 handoffs

Make Connections Visible

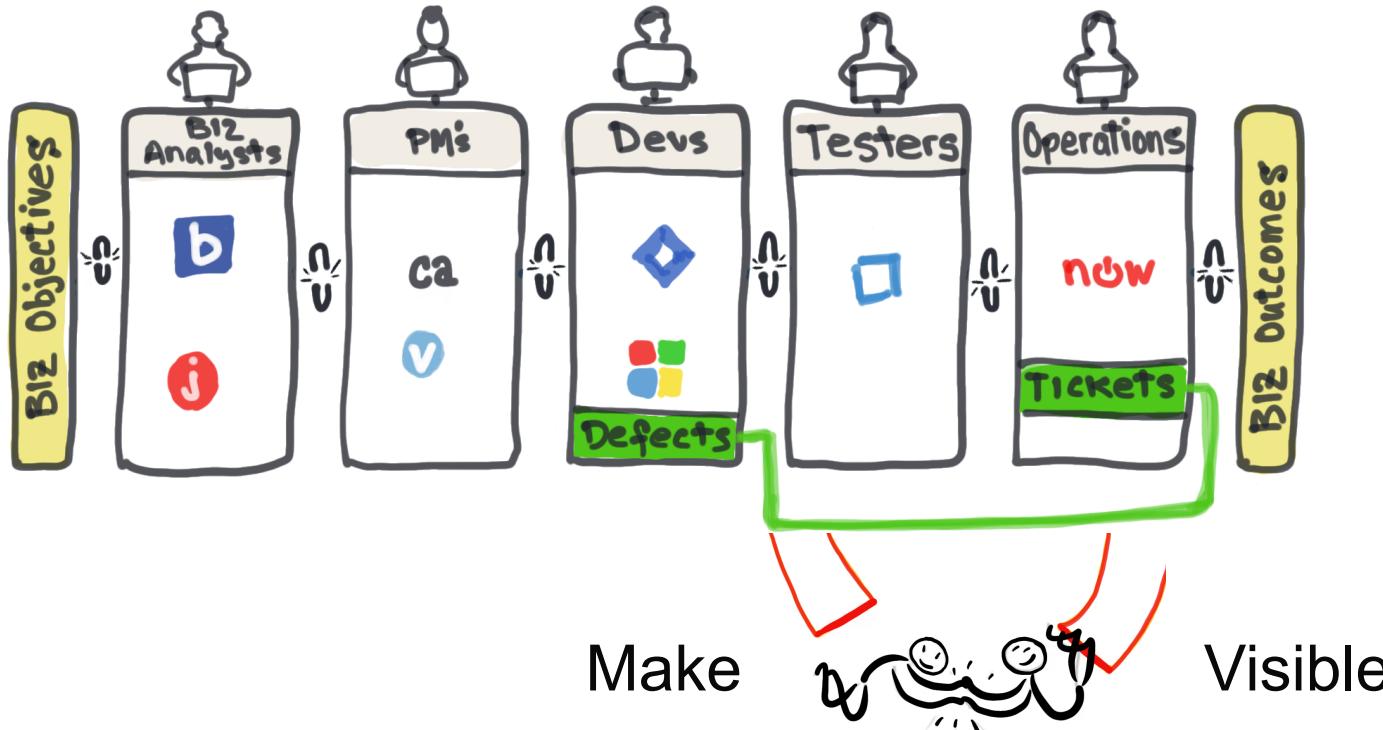


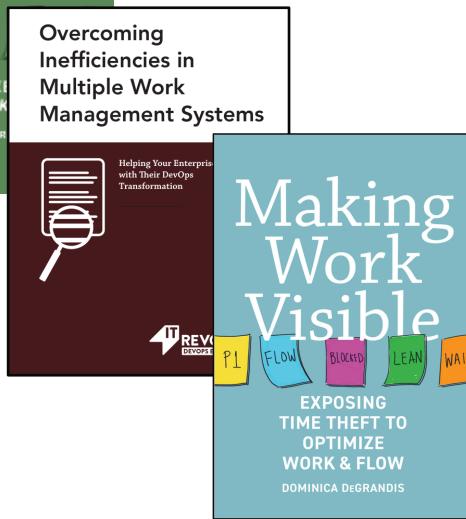
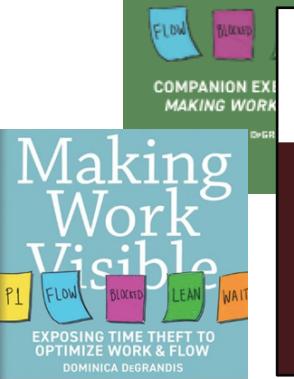
- Connect the dots
- Start with 2–3 handoffs
- Synchronize important info
- Discover bottlenecks

BENEFITS

- Improve flow time
- visibility of progress
- Traceability of info from handoffs

Synchronize Coordination





Email: dominica@SendYourSlides.com

Subject: **flow**

To receive:

- copy of this presentation deck
- excerpts of Making Work Visible
- Tasktop video on JIRA/SN tool integration
- Forrester article: Agile-Plus-DevOps With Value Stream Management
- IT Rev paper: Overcoming inefficiencies in work mgmt. systems