

CONTINUOUS DELIVERY WAS NEVER ABOUT FASTER

Ken Mugrage - ThoughtWorks

CONTINUOUS DELIVERY WAS
NEVER ABOUT FASTER. IT IS
FASTER BUT THAT'S A HAPPY
ACCIDENT AND YOU
SHOULDN'T PLAN FOR IT OR
MEASURE IT

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The Discovery of Penicillin

- ❖ Alexander Fleming discovered it in 1928, by accident
- ❖ First shown to be effective on bacterial infection in mice in 1940
- ❖ First human treatment in 1941
- ❖ United States produced 2.3 million doses in time for the WWII Normandy invasion

Other Great Accidents

- ❖ Microwave Oven
- ❖ Quinine
- ❖ X-rays
- ❖ Velcro
- ❖ Insulin
- ❖ Continuous Delivery

15 years ago we knew everything

- ❖ Defined Continuous Integration
- ❖ Created the first (or second) CI server
- ❖ Created Selenium

Java – Write once, run anywhere

- ❖ Developed a system on Windows laptops to be deployed to a Solaris cluster
- ❖ Did all of the right Continuous Integration things
- ❖ One small issue...

It didn't work in production

Conan The Deployer

- ❖ Massive shell script
- ❖ Automated deployment to a cluster after every successful CI run
- ❖ Deployment became a non-issue

Results of the Accident

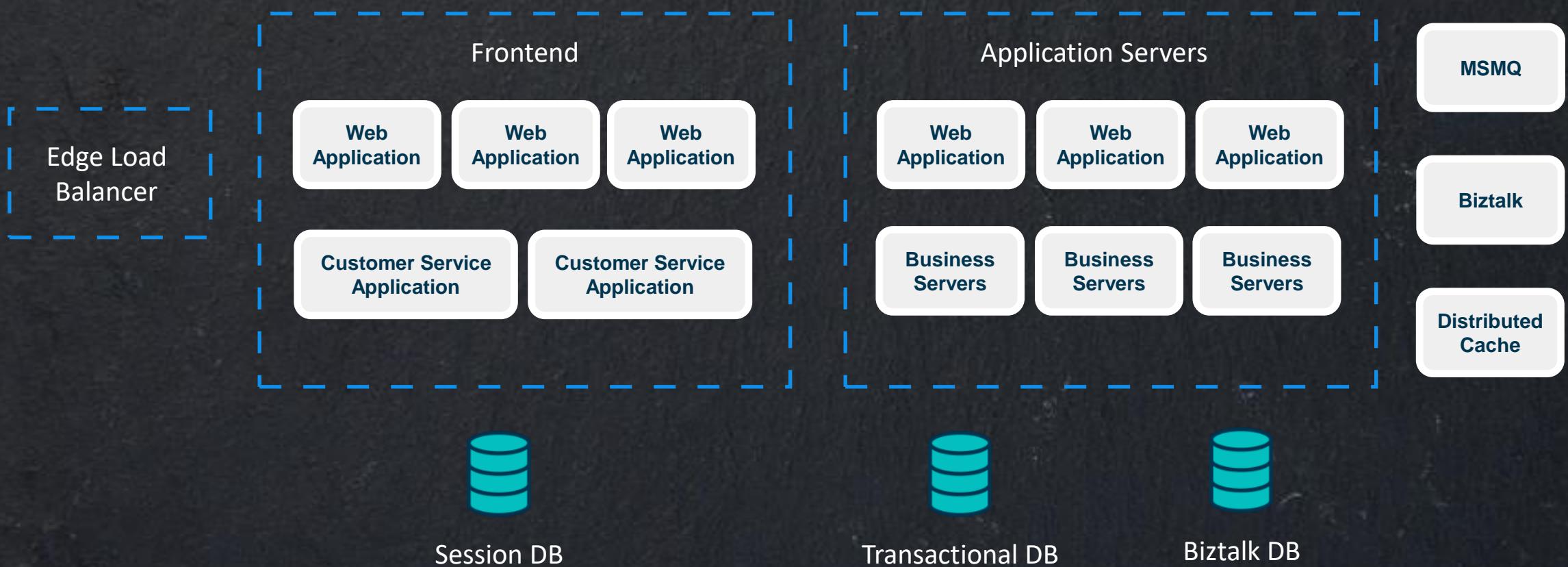
- ❖ The Deployment Production Line
- ❖ The Continuous Delivery Book
- ❖ GoCD

They were not trying to get faster, or be more responsive to the business, or cut down lead time, or improve their value stream map

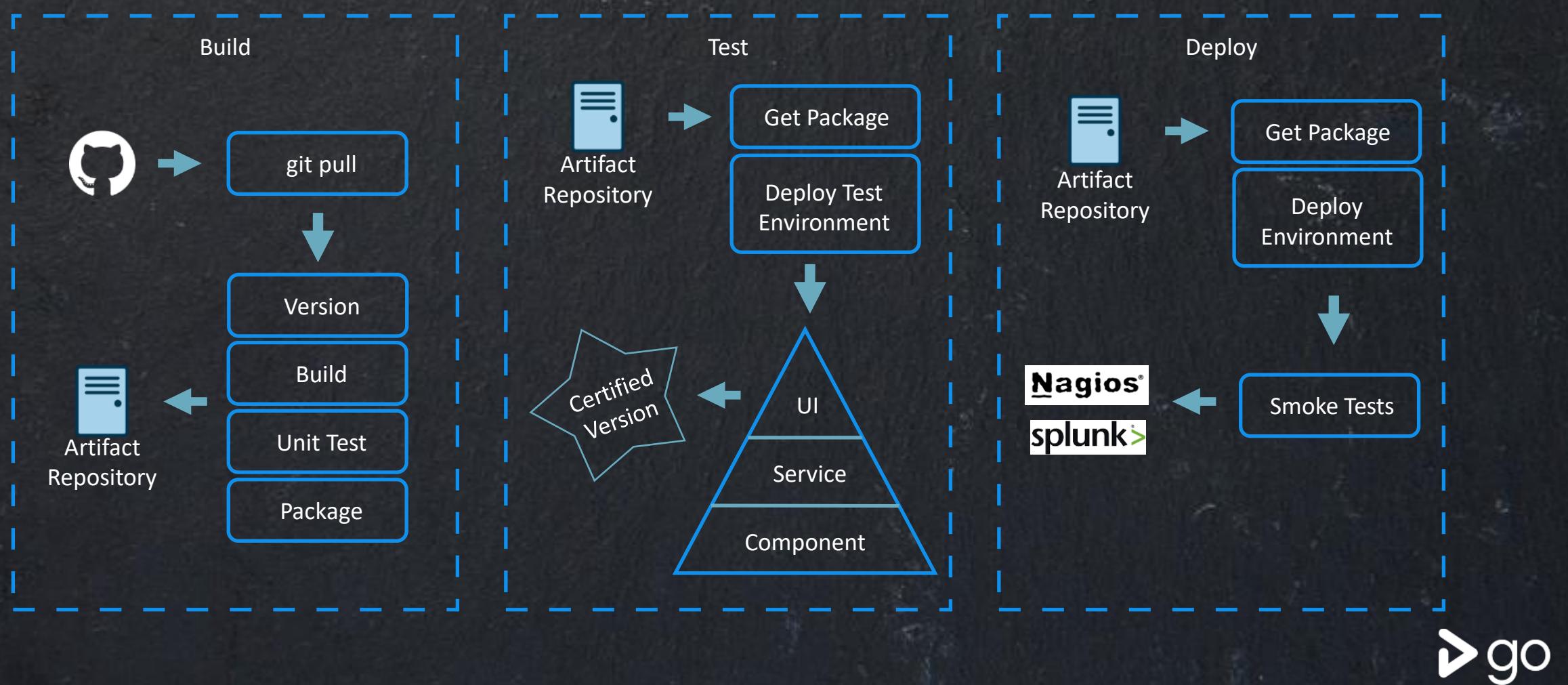
It was about making sure it worked

Several Years Later...

Fairly typical architecture



Traditional Continuous Delivery



It was automated now

- ❖ It worked in production (yay!)
- ❖ It was hard to scale the applications
- ❖ It was hard to work on complicated applications



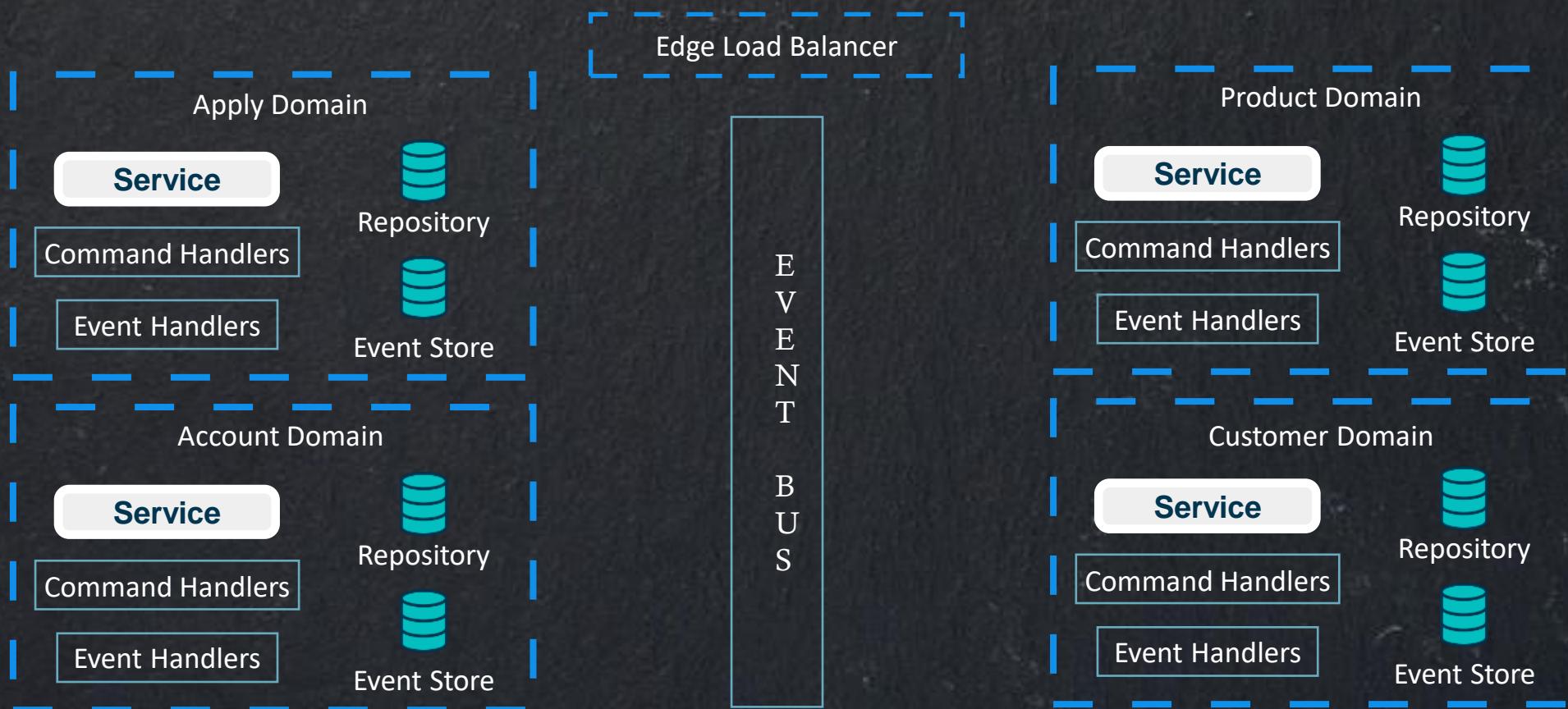
MICROSERVICES

To the rescue!

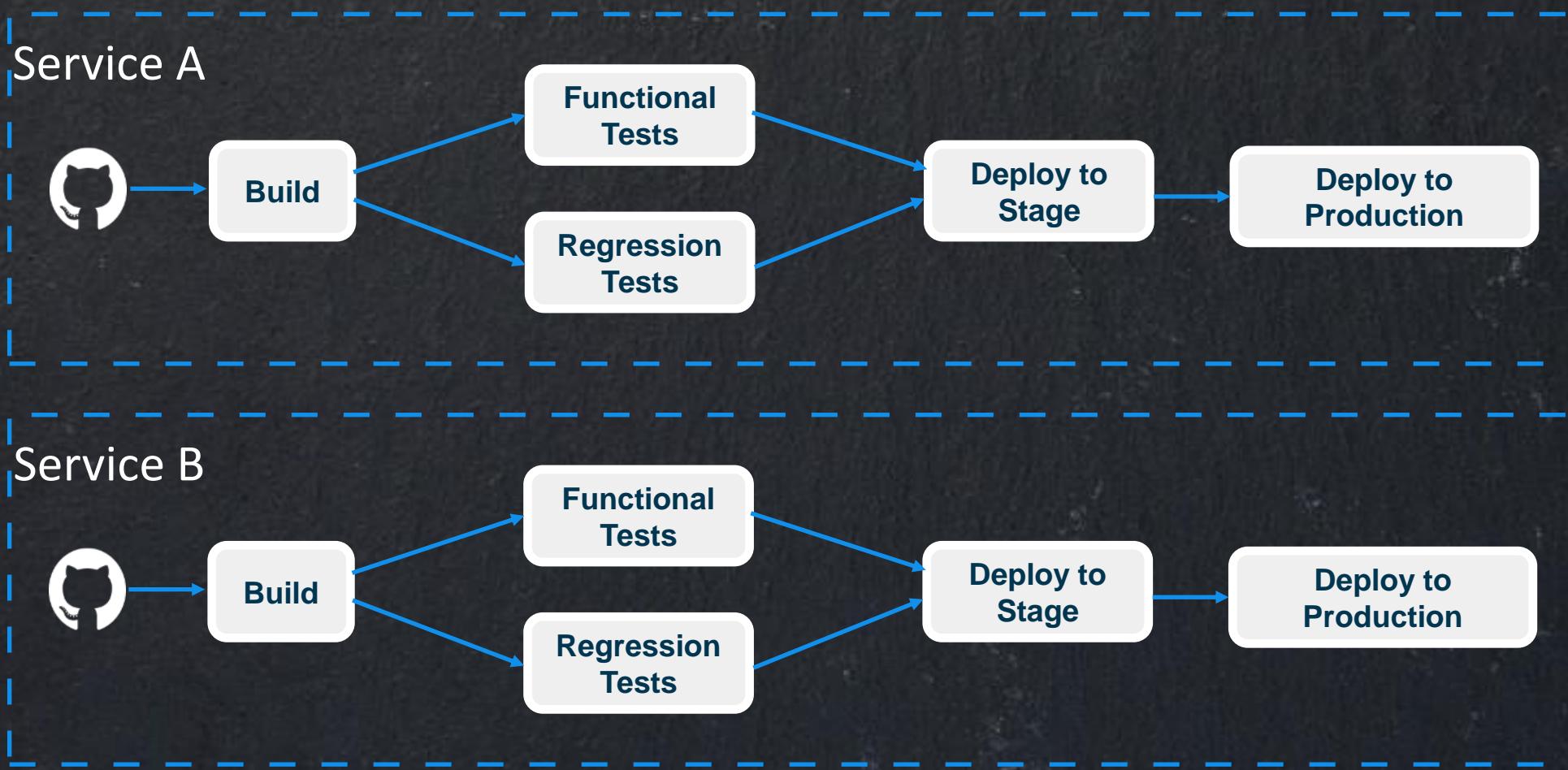
Image by @lizparody23

<https://nodesource.com/blog/microservices-in-nodejs>

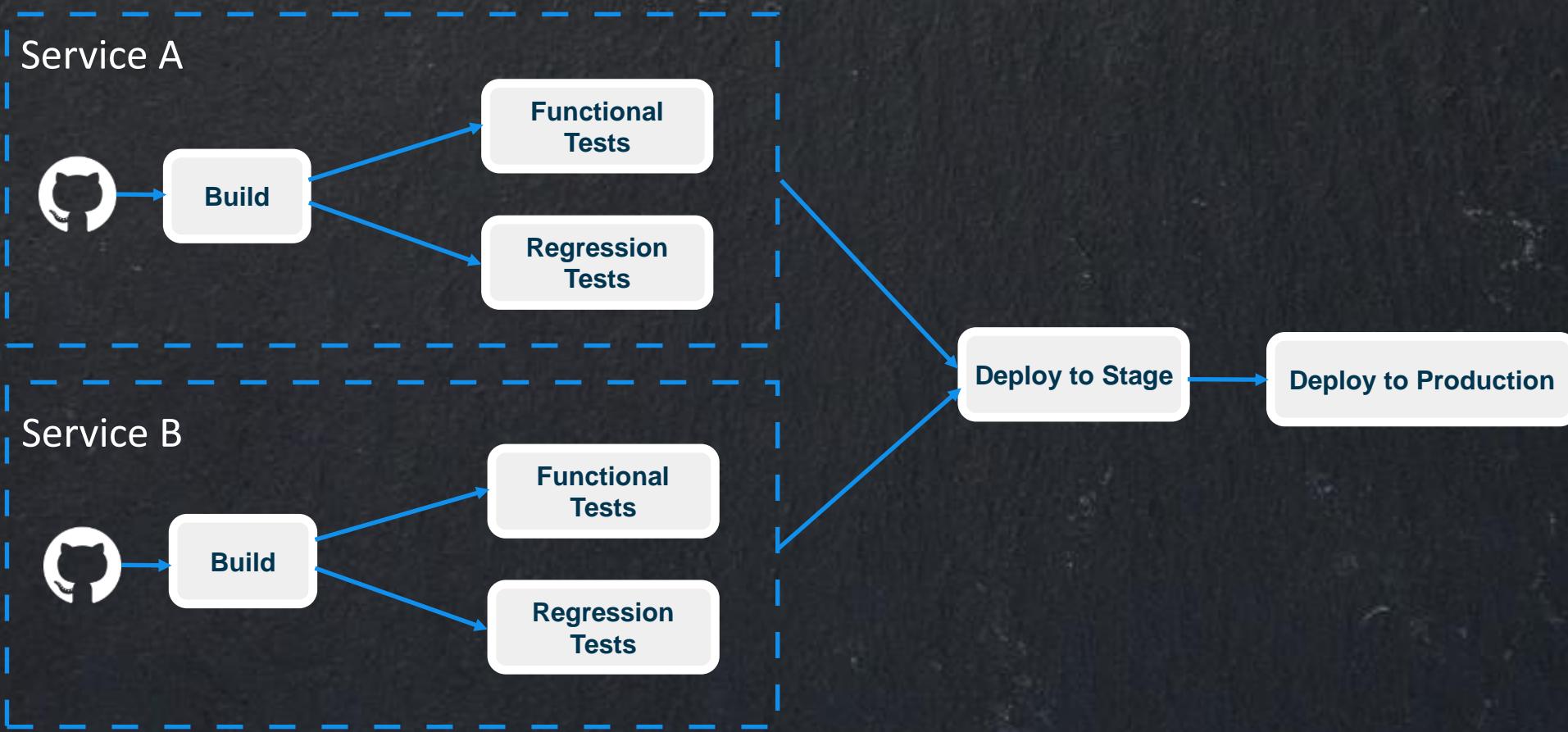
Financial Services Platform



Modern Pipelines



Another option



These pipelines are super fast!

That's a side effect, not a pipeline design goal

Getting Ideas Out Of Your Head And Into The Hands Of Customers

Just write the code for the story



Write the code in a CD compatible way



This includes any infrastructure, pipeline, data model or other changes required to support the feature!

Is this really done?



Done isn't really done

“Dev” Team



“QA”, Security, Compliance

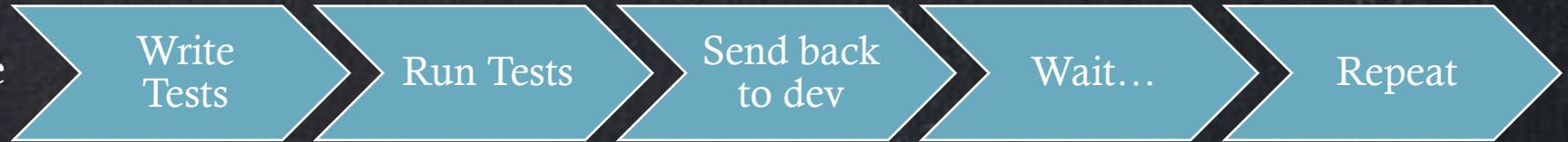


Done isn't really done

“Dev” Team



“QA”, Security, Compliance



“DevOps” Team



Continuous Delivery ≠ DevOps

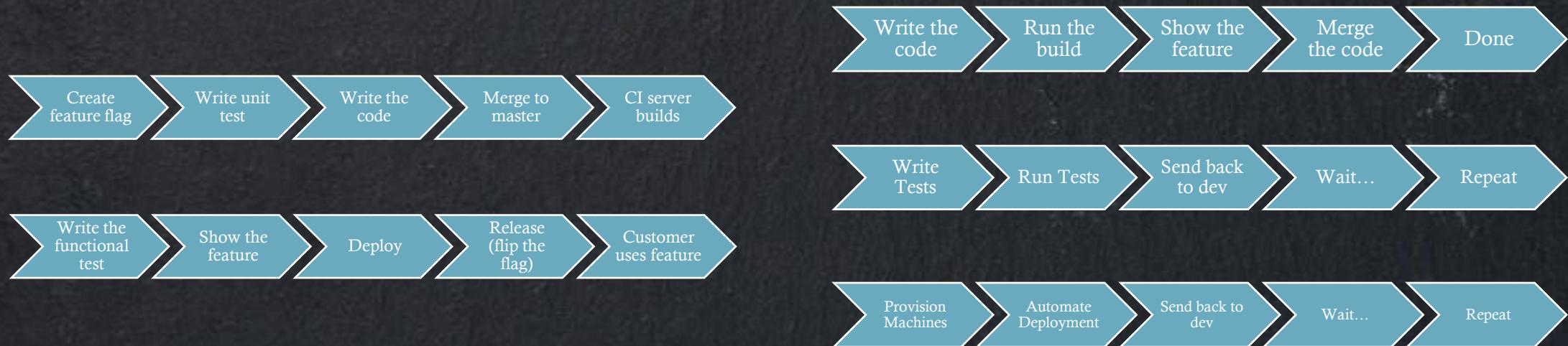
“ Continuous Delivery is the ability to get changes of all types—including new features, configuration changes, bug fixes and experiments—into production, or into the hands of users, *safely* and *quickly* in a *sustainable* way. ”

Jez Humble

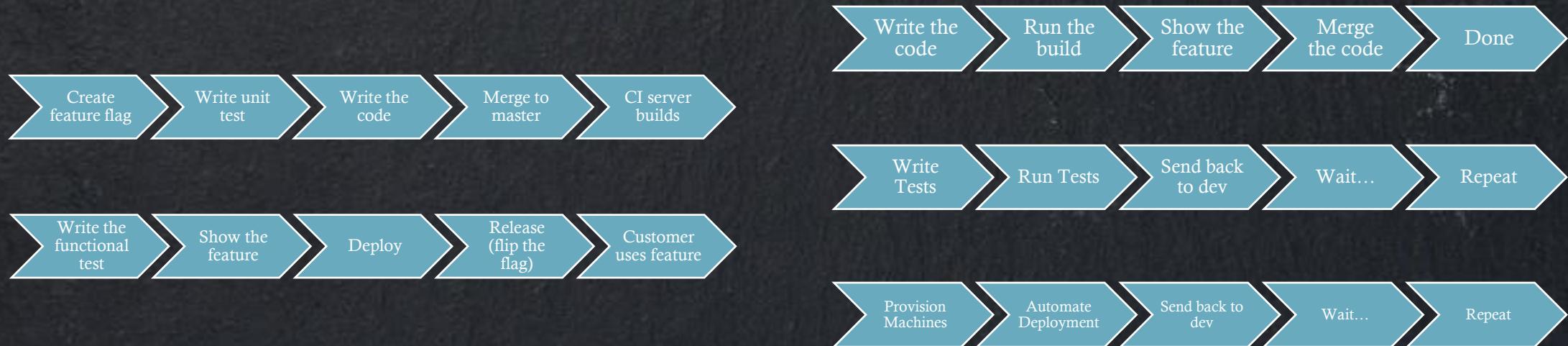
“ DevOps: A culture where people, regardless of title or background, work together to imagine, develop, deploy and operate a system. ”

Ken Mugrage

These could both be added to a CD pipeline.
Which one is a DevOps Culture?



These could both be added to a CD pipeline.
Which one is faster?



If you have a DevOps team,
you're doing it wrong.

(please don't hate me)

“ Continuous delivery for the sake of continuous delivery is not enough if you want your organization to succeed, however. It must be done with an eye to organizational goals such as profitability, productivity, and customer satisfaction. ”

Accelerate: State of DevOps 2019 | How Do We Improve SDO & Organizational Performance?

Metrics That Matter

“

Our business is in great shape! We've gone
from 2 deployments a month to 20
deployments per day!

”

No CEO Ever

metrics drive behavior



All

Images

News

Maps

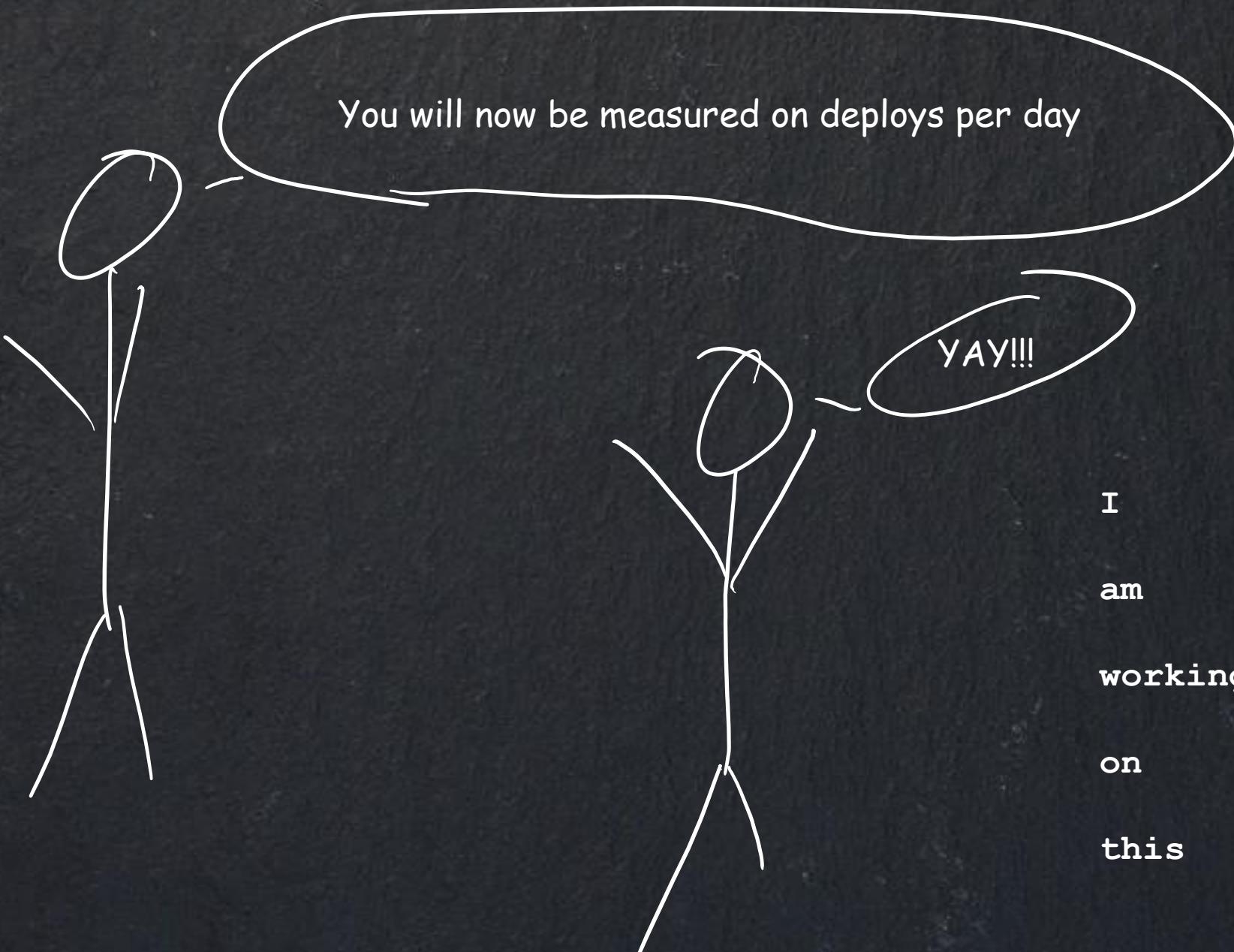
Videos

More

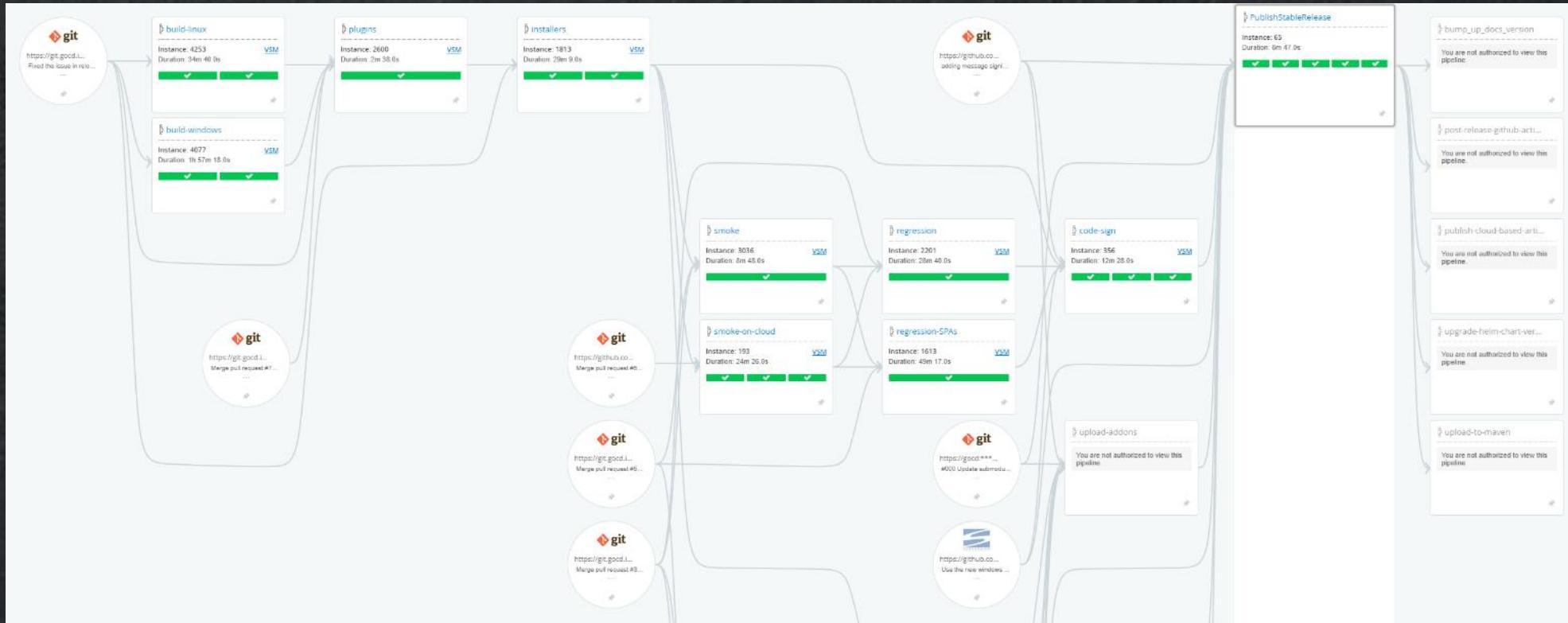
Settings

Tools

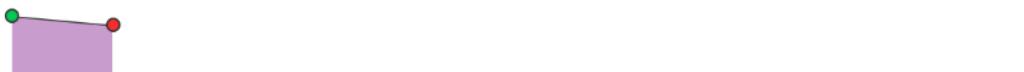
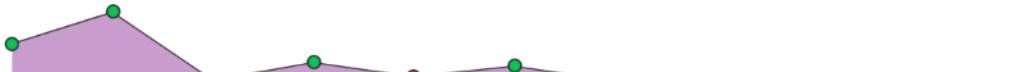
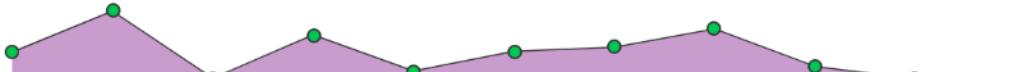
About 45,000,000 results (0.64 seconds)



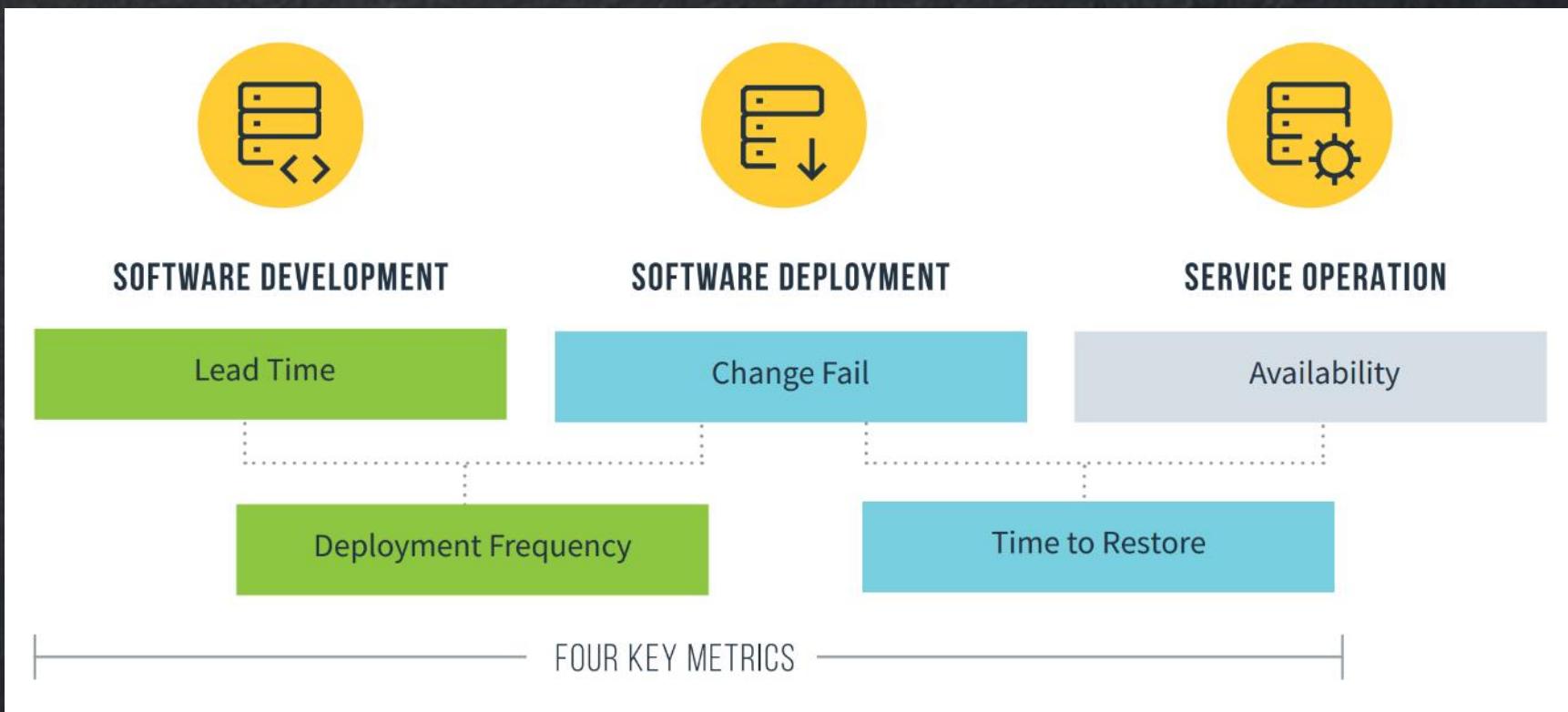
Our Pipeline



Our Pipeline

VSM TREND	STARTED AT	COMPLETED AT	TIME TAKEN
	11 Sep 04:06	11 Sep 04:35	29m
	11 Sep 02:06	11 Sep 04:33	2h 28m
	11 Sep 01:19	11 Sep 02:46	1h 27m
	10 Sep 21:08	10 Sep 23:00	1h 52m
	9 Sep 23:12	10 Sep 00:44	1h 33m
	9 Sep 22:59	10 Sep 00:10	1h 10m

Accelerate State of DevOps



Elite Performers

Aspect of Software Delivery Performance	
Deployment frequency	On-demand (multiple deploys per day)
Lead time for changes	Less than one day
Time to restore services	Less than one hour
Change failure rate	0-15%

Summary

- ❖ CD isn't about faster.
- ❖ CD in a DevOps culture is!
- ❖ Deployment goals should be business driven.
- ❖ Metrics drive behaviors.

Thank You!