GRACE HOPPER CELEBRATION





Building a Service Delivery Infrastructure



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Building a Service Delivery Infrastructure Ecosystem

What is it?



business capability delivered in



services & applications



business value

delivered by



business capability

delivered in



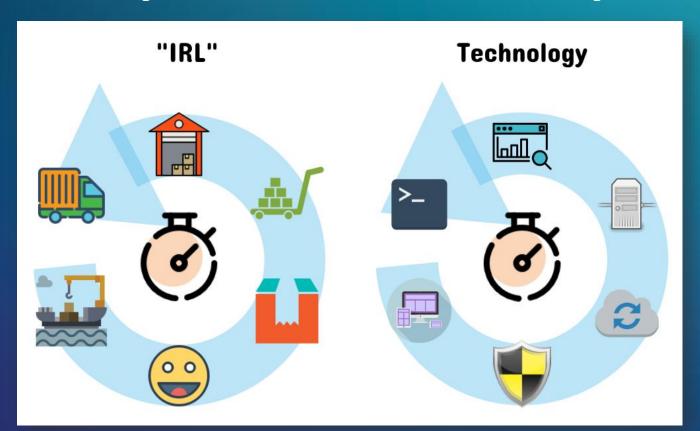
services & applications

delivered on



infrastructure

Delivery Infrastructure Ecosystem



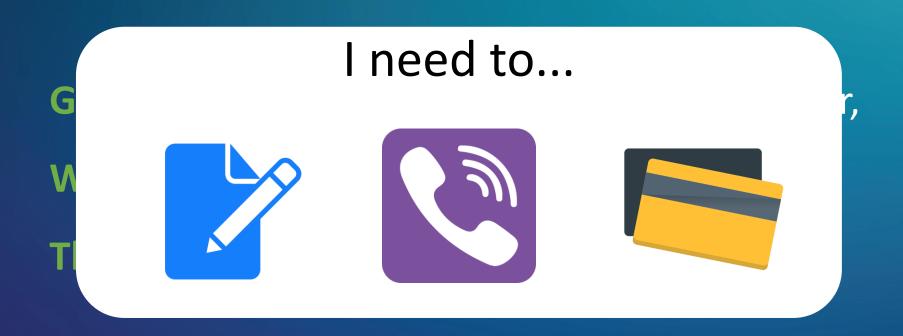
Deliver Me, "Hello Customer!"

Given an identifier associated with a customer,

When I call an API endpoint

Then I should get the customer's name.

Deliver Me, "Hello Customer!"



As a developer...

I WANT TO BE PRODUCTIVE

Use Narratives to Describe Needs

As a ... I want ... So that ...

More / less detail

Consider acceptance criteria

Example: Core Compute

As a developer

I want to use CPU and memory resources

So that I can deliver some business capability.

Example: Secrets Management

As a developer

I want to securely manage my secrets

So that I can mitigate exposure to passwords.

Ecosystem Products and Journeys

PATH TO PRODUCTION ("Hello Customer" P2P)

EVTEDNIAL

PATH TO REPAIR ("Hello Customer" P2R)

PATH TO COMPLIANCE ("Hello Customer" P2C)

As an infrastructure engineer...

I WANT TO RECLAIM MY NIGHTS & WEEKENDS

"Expert Developer" or "Hero Operator"?

Neither!

Learn infrastructure-as-code

End goal: quickly deliver "Hello, Customer!"

Example: Deployment Pipeline

As a developer / infrastructure engineer

I want to deliver my service / infrastructure in an automated way

So that it is secure, compliant, and ready for my customer.

Infrastructure Deployment Pipeline

Conformance Tests, can run asynchronously

UNIT

Check configurations

terraform plan

BUIID

TFST

Check integrations

gcp, awspec

SECURE

Check security

scout2, g-

MONITOR

Check monitoring

Example: pytest

PERFORM

Check performance

locust, pumba

PROMOTE

Ready for next environment

As an architect...

I WANT TO CHAMPION THE ARCHITECTURE "-ILITIES"

Architecture Fitness Functions

security

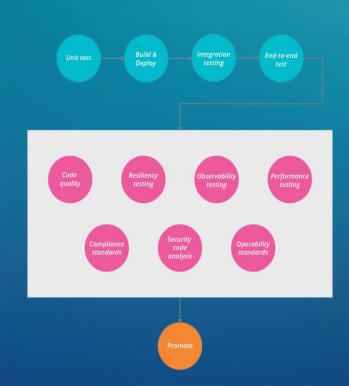
0 high vulnerabilities

resiliency

less than 1% error rate for new deployment

auditability

less than 90 days since last audit





business value

delivered by



business capability

delivered in



services & applications

delivered on



As a CxO...

A Balancing Act

Evolvability

Vendor Lock-In

Build vs. Buy

Autonomy

Cost

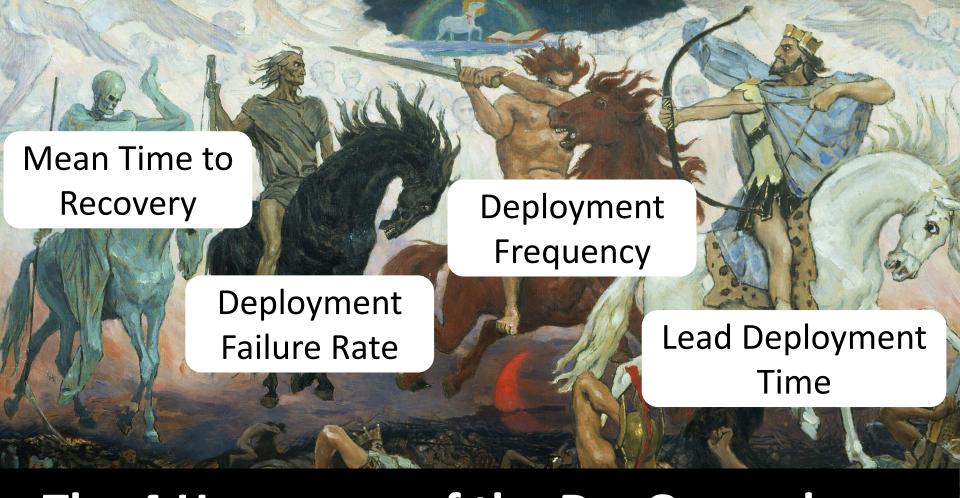
Fixed vs. On-Demand Capacity

Compliance

Complexity

Vendor Management

Global vs. Regional



The 4 Horsemen of the DevOp-ocalypse

Where do we start?

As an organization...







Capabilities Development?



Executive Buy-In?



Known Journey?

As an individual...

remember join/build read experiment re-purpose your a examples community customer

Please remember to complete the session survey in the mobile app.

THANK YOU YOU CAN *FOLLOW US@*











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#GHC19