

From VI Admin to SRE

A journey through clouds

Michael Roy
Desktop Hypervisors

Speaker Introduction

Michael Roy

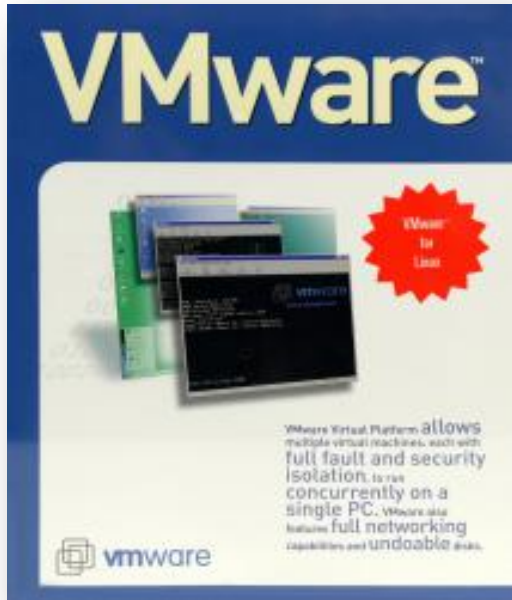
Product Line Marketing – Desktop Hypervisor

Blog @ mikeroysoft.com

GitHub @ github.com/mikeroysoft

Twitter @mikeroySoft





1999

From 1:1
To 1:many



**Walking
Path**

1.3 Miles

1.1 Miles

2.2 Miles

**Walking
Path**

1.3 Miles

1.1 Miles

2.2 Miles

We wouldn't be here without each other



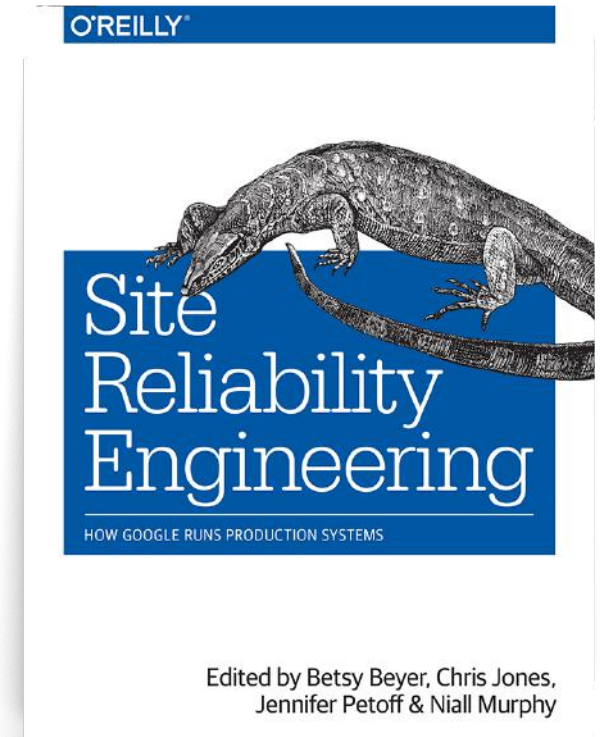
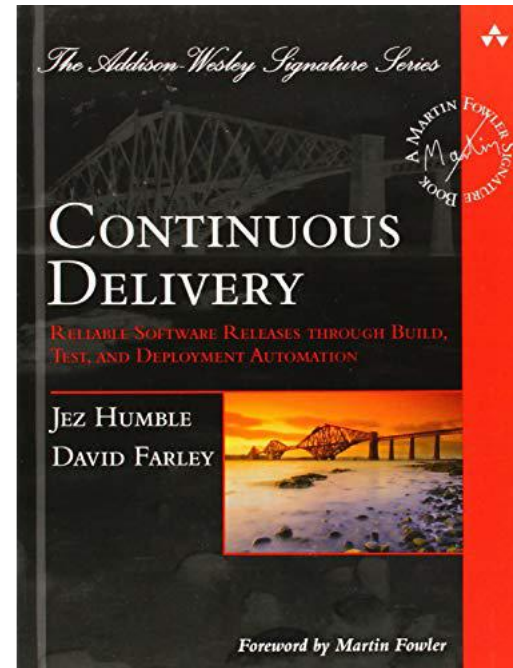
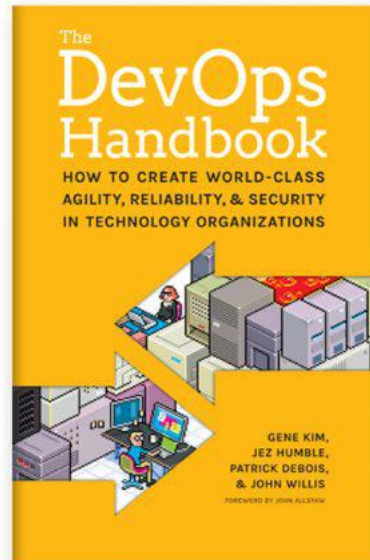
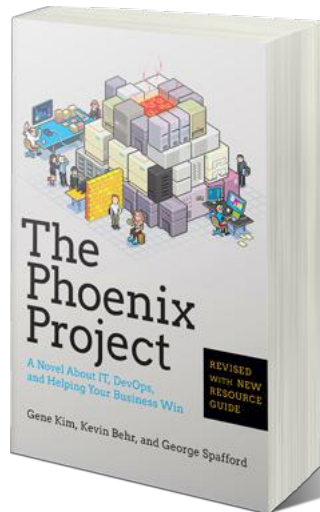
An Industry Transformation

A tremendous culture shift and opiniated technology movement



An Industry Transformation

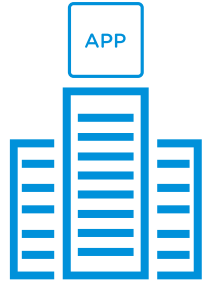
A tremendous culture shift and opiniated technology movement





We have had industry transformations before

What have we learned?



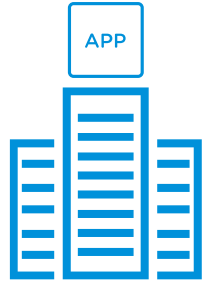
Monolithic
Manual



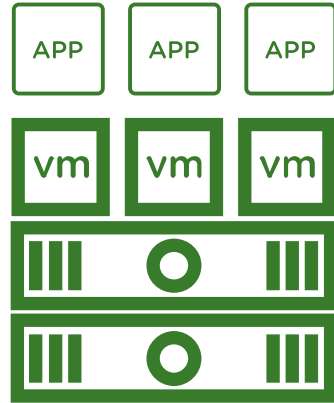


We have had industry transformations before

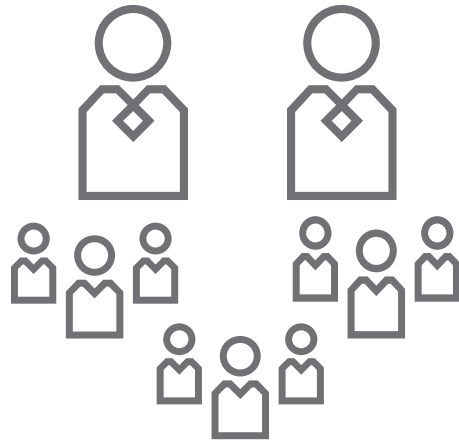
What have we learned?



Monolithic
Manual



Monolithic
Some automation



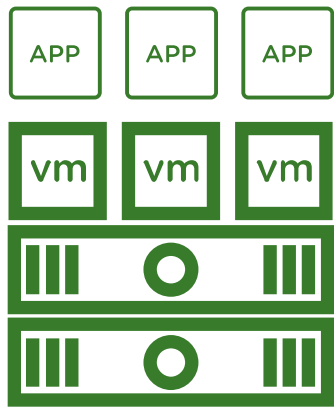


We have had industry transformations before

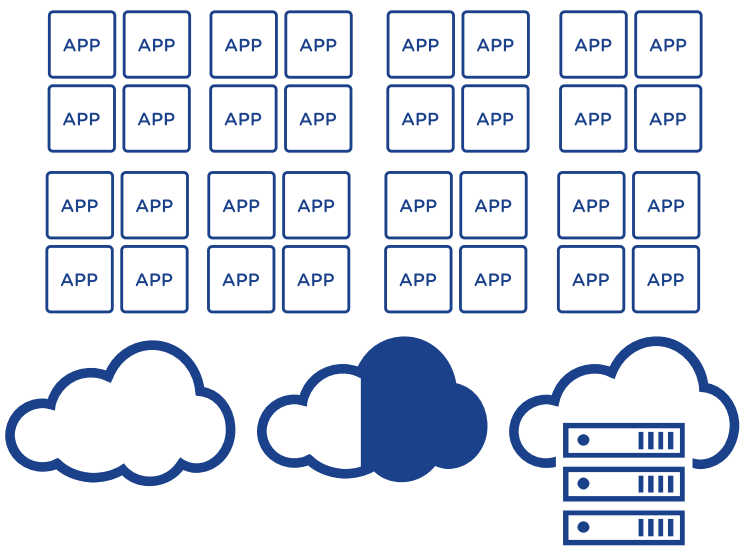
What have we learned?



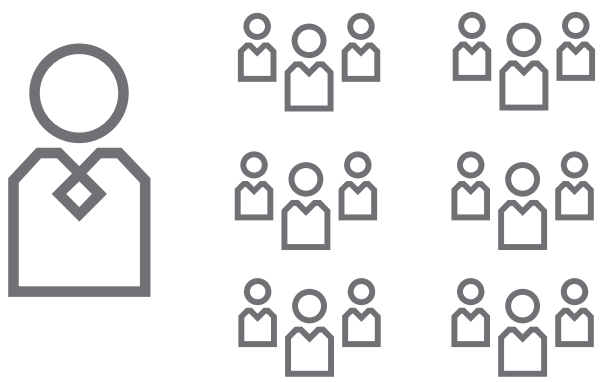
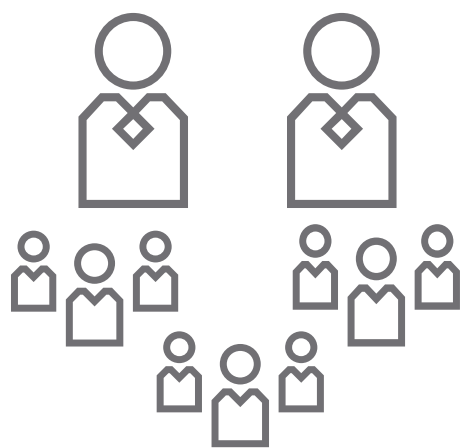
Monolithic
Manual



Monolithic
Some automation



Some Continuous Delivery
Infrastructure-As-Code



Everything the Data Center lights touch is yours



Everything the Data Center lights touch is yours



Everything the Data Center lights touch is yours
But business requirements ***always find a way...***



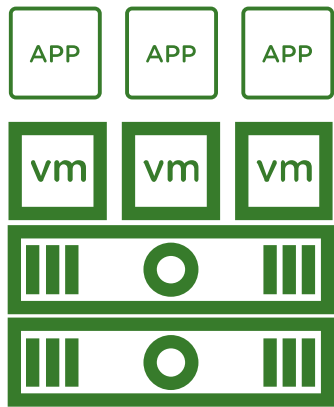
BUSINESS
REQUIREMENTS
FIND A WAY

We have had industry transformations before

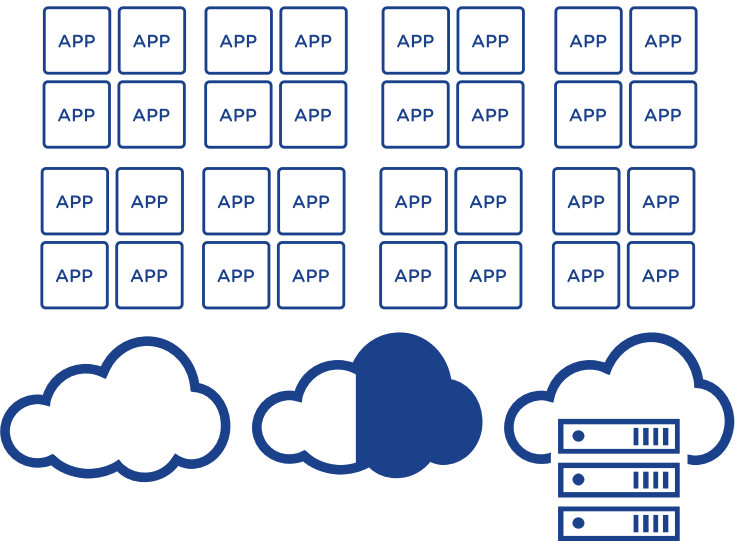
What have we learned?



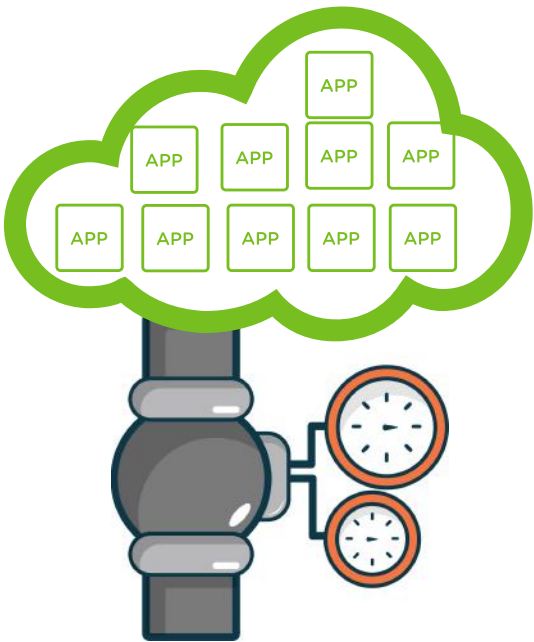
Monolithic
Manual



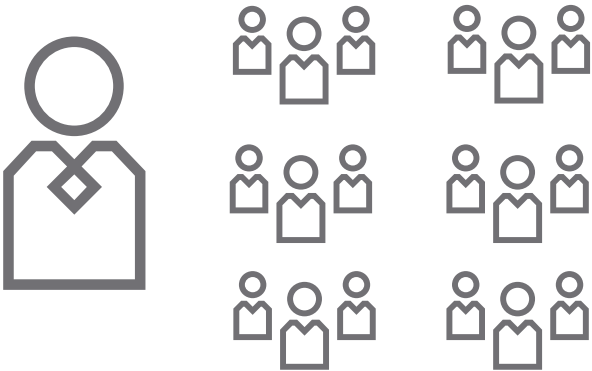
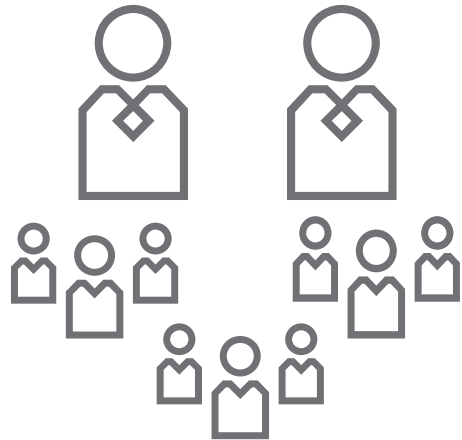
Monolithic
Some automation



Some Continuous Delivery
Infrastructure-As-Code

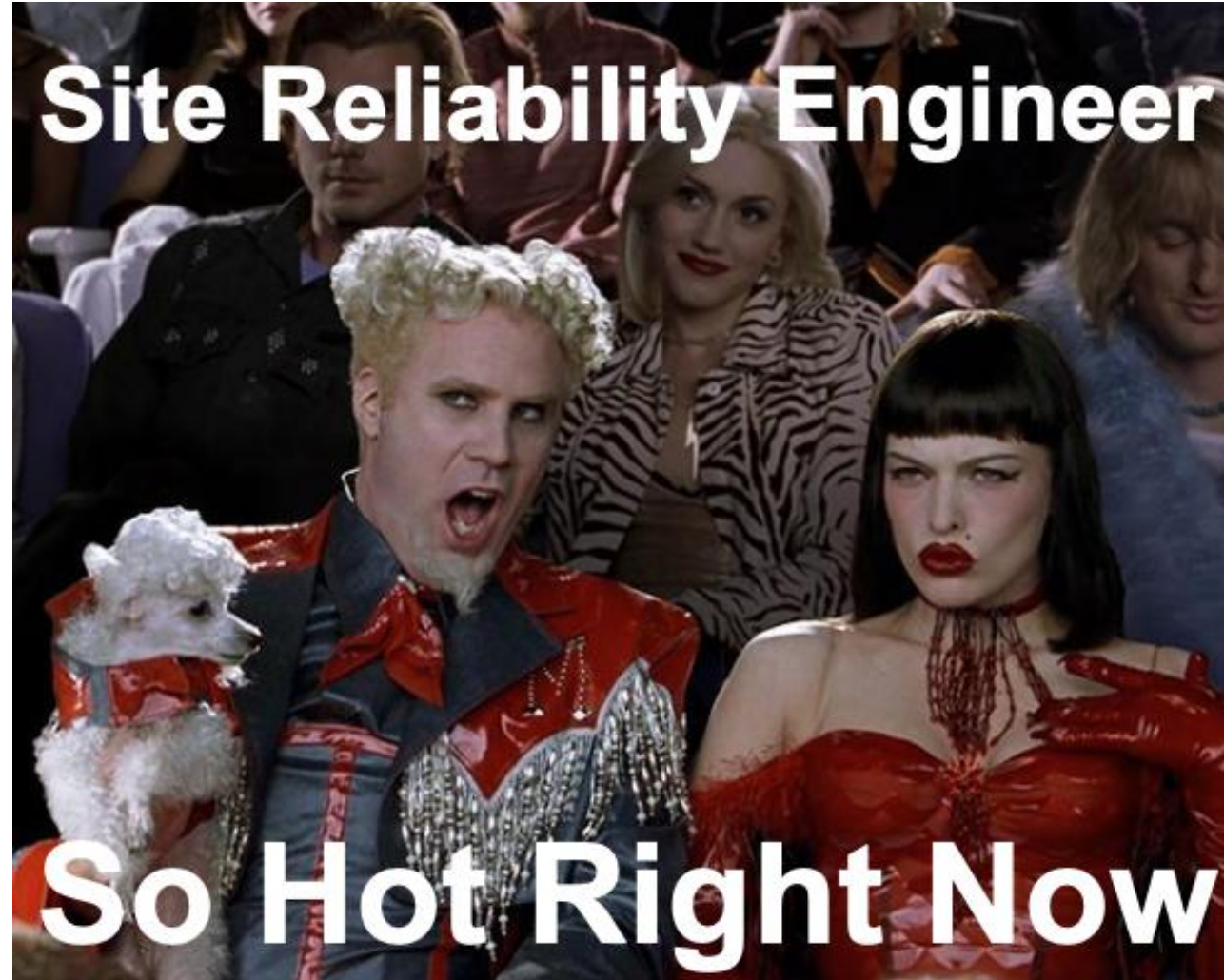


Continuous Delivery
Orchestration



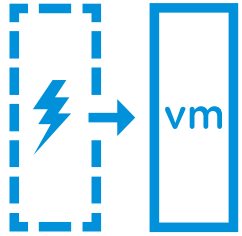
Enter: The SRE

Born from the need to manage complexity



What are you responsible for?

Everything the light touches and more...



Availability



Latency



Performance



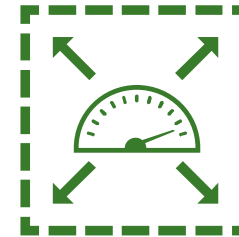
Efficiency



Change Management



Monitoring



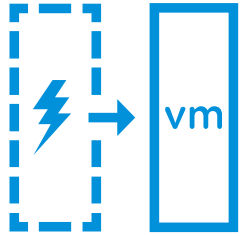
Capacity Planning



Emergency Response

What is Site Reliability Engineering responsible for?

Seem Familiar?



Availability



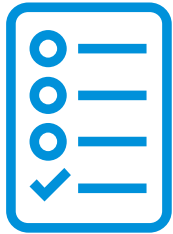
Latency



Performance



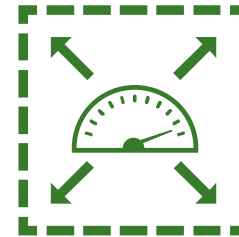
Efficiency



Change Management



Monitoring



Capacity Planning

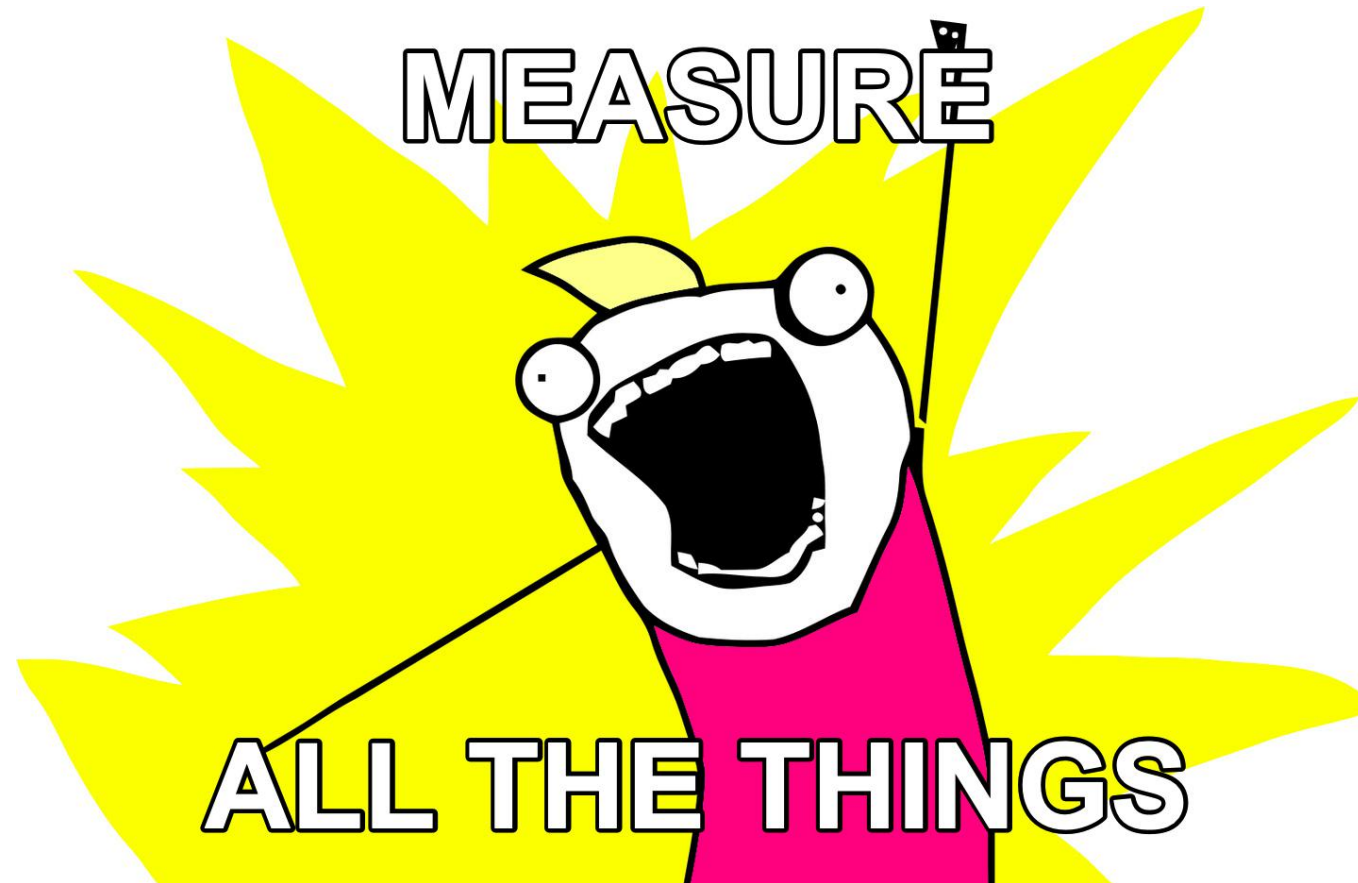


Emergency Response

Key Values of an SRE

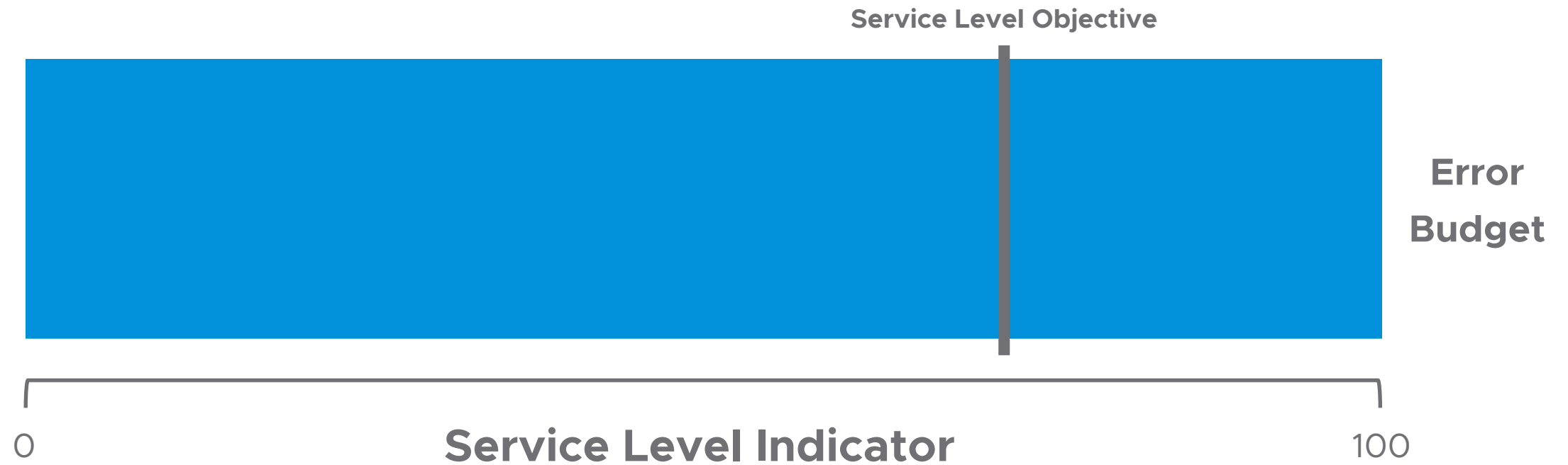
Key Values of SRE

1) Operations is a Software Problem



Key Values of SRE

2) Manage by Service Level Objectives



Key Values of SRE

3) Minimize Toil

Toil	Engineering Work
Lacks Enduring Value	Builds Enduring Value
Rote, Repetitive	Creative, Iterative
Tactical	Strategic
Increases with Scale	Enables Scaling
Can be Automated	Requires Human Creativity

Source: <https://www.rundeck.com/blog/toil-finally-a-name-for-a-problem>

Key Values of SRE

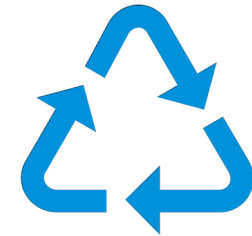
4) Automate, then Automate the Automation



Automate the Remediation



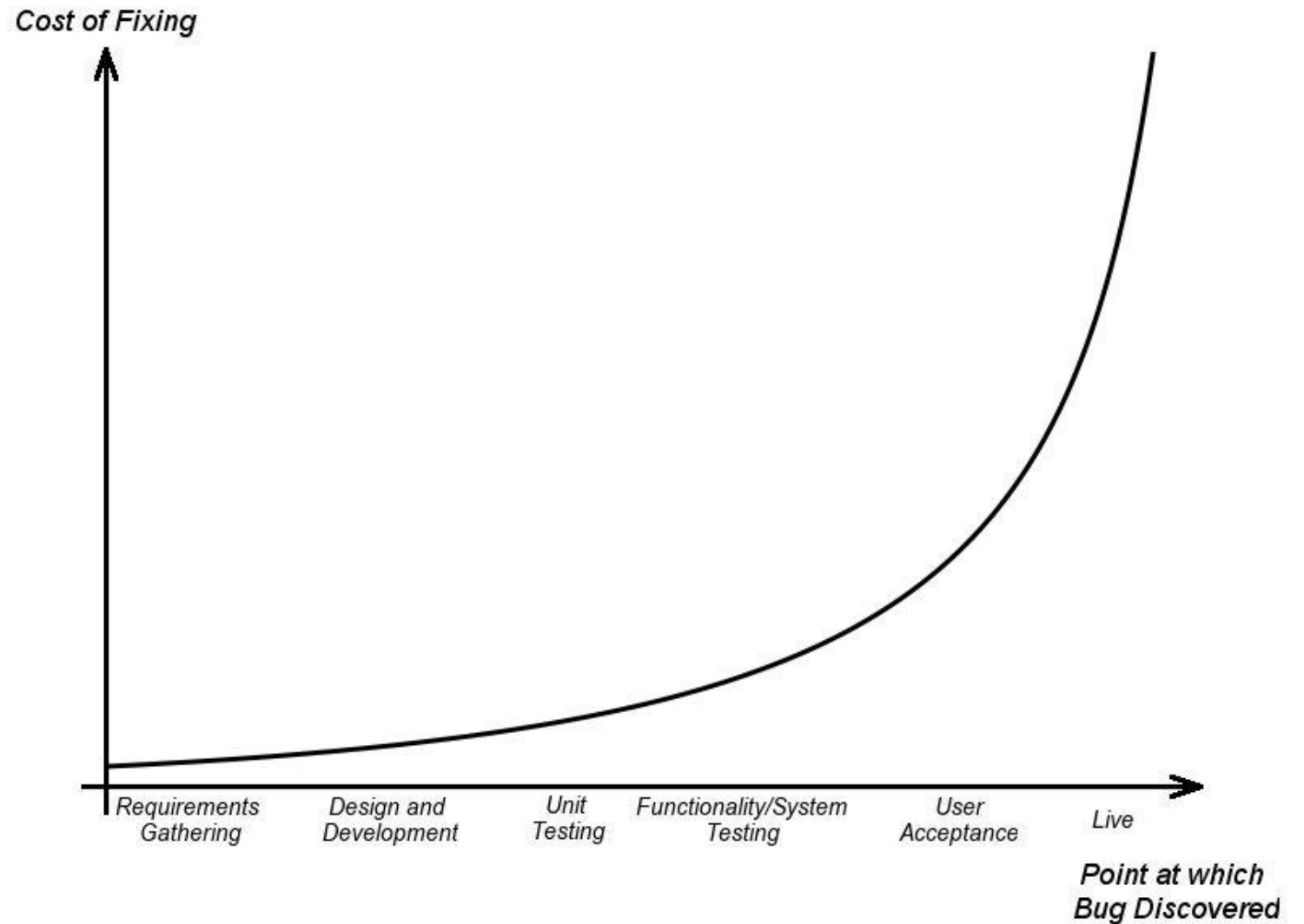
**Automate the Detection
& Remediation**



Improve the Service

Key Values of SRE

5) Reduce Cost of Failure



Key Values of SRE

6) Share Ownership with Developers



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Key Values of SRE

- 1) Operations is a Software Problem
- 2) Manage by SLOs
- 3) Minimize Toil
- 4) Automate, then Automate the Automation
- 5) Reduce Cost of Failure
- 6) Share Ownership with Developers



“The two most important principals to keep in mind [when transitioning to SRE] is one: ***to have a widespread global view***, and secondly: as much as possible, ***reduce the size of each delivery batch.***”

Virtualization is at the Intersection of Dev and Ops

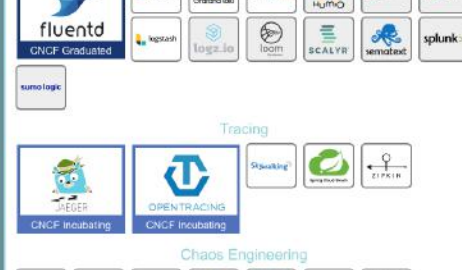
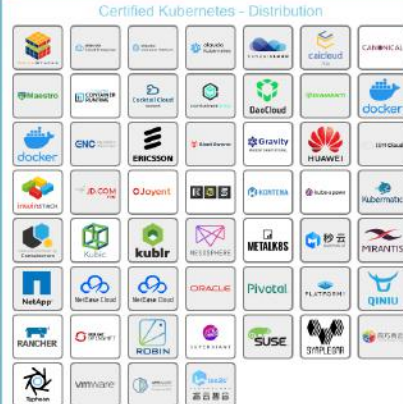
VMware's unique position



The Cloud is Not a Place, it's an Operating Model

And VMware on this transformative journey with you





You are viewing 684 cards with a total of 1,605,893 stars, market cap of \$7.06T and funding of \$12.2B.

App Definition and Development

Operation & Management

Runtime

Provisioning

Cloud Providers

Platform

Observability
and Analysis

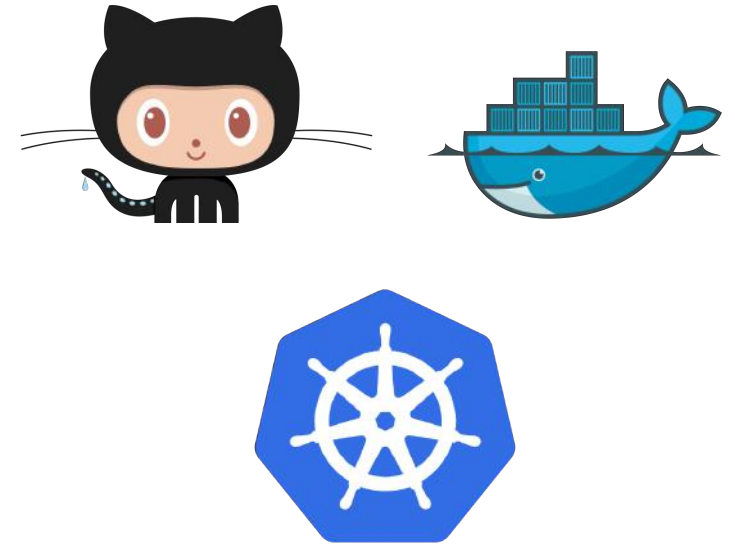
Serverless

Service and Training Partners

Where to go from here?

Learn new tools and operating models

- Further Familiarize Yourself with LEAN, DevOps and SRE Concepts
- Learn Source/Version Control Fundamentals
- Learn Configuration Management and Infrastructure as Code Principles
- Some Organizational Dependent Items
 - Find a Common Tool Set Between Teams
 - Reduce Toil
 - Find a Small Project to Start With
 - Monitoring Design
 - Is your dashboard aligned to the KPI's of your application?



Books

Recommended Reading

The Phoenix Project – Gene Kim

Beyond The Phoenix Project – Gene Kim

Dev Ops Handbook – Gene Kim
Continuous Delivery –

Jez Humble **Site Reliability Engineering**
Site Reliability Workbook

- <https://landing.google.com/sre/books/>



Thank You
Q/A

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