



# Selenium Testing your Kubernetes Apps with Machine Learning & Testim



 **code**fresh

Oren Rubin | Founder & CEO | Testim  
Dan Garfield | Chief Evangelist | Codefresh



**testim**

# Dan Garfield

Chief Evangelist, Codefresh

 @TodayWasAwesome



Over 3.5 million images built

## Customers





# Oren Rubin

 @shexman

## **Testim.io**

CEO

## **Mentor**

Google Launchpad

## **Applitools**

Director of R&D

## **Developer Expert**

Google

## **Wix**

Web Architect

## **External Lecturer**

Technion University

## **Cadence**

Compiler Engineer

## **Meetup Co-Organizer**

Selenium IL, GDG, Ember.js

## **IBM**

Cloud Engineer

# Agenda

- Benefits, Challenges of UI/E2E Testing
- How to do it better w/ Machine Learning
- Dealing w/Microservices
- Demo



# Why Test?

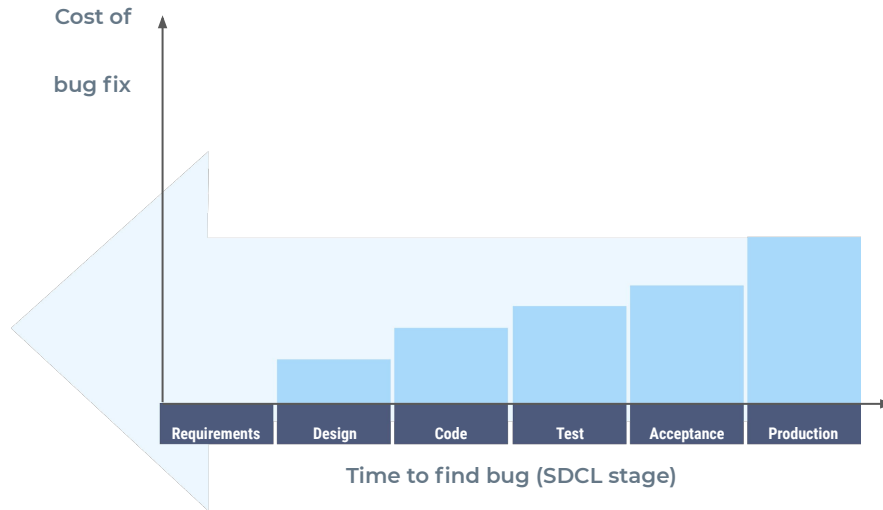
Unit Tests: 2

Integration Tests: 0

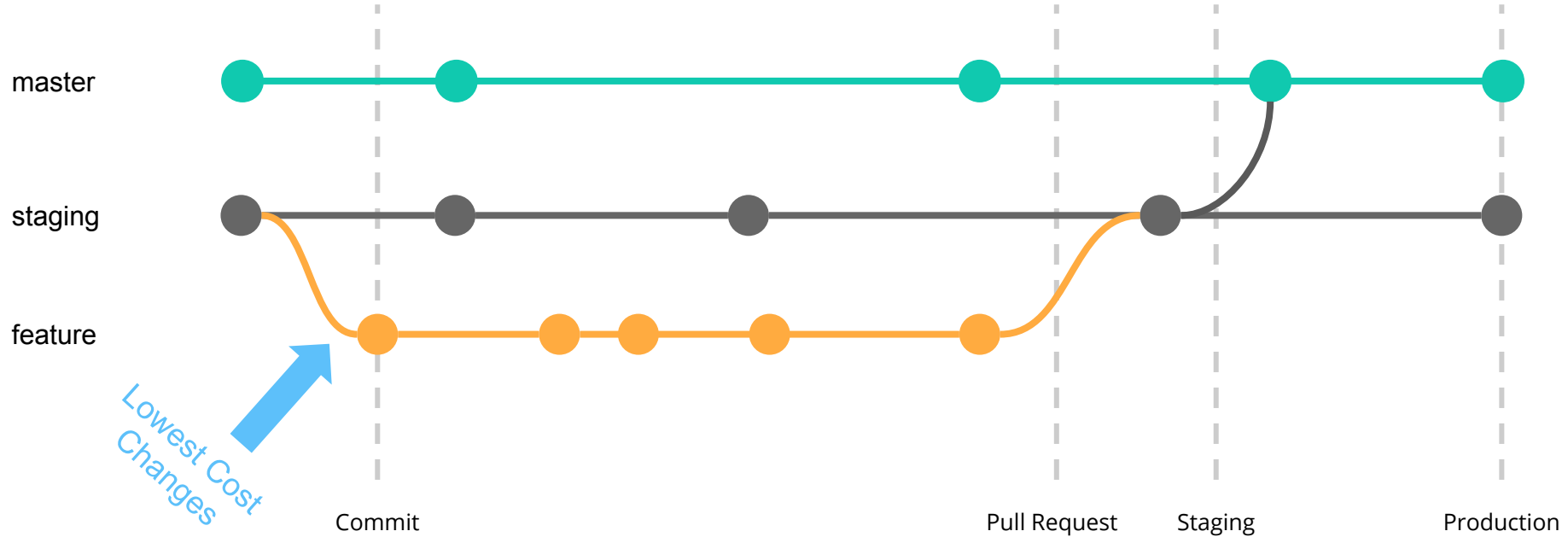


# Shift Left

COST OF A BUG FIX ACROSS DEVELOPMENT LIFE CYCLE

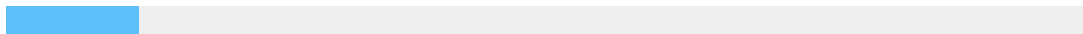


# Shift Left - When do the tests happen?



# How far have you shifted left?

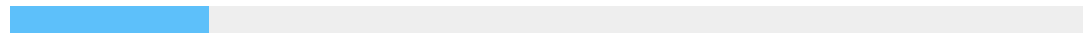
Not at all, we test last, we test quality into the product **13%**



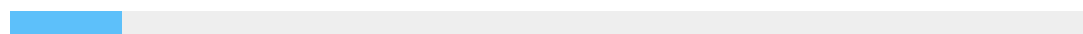
Testing involved early, but still have an extended test phase before release **57%**



We could probably release after every sprint **19%**



We could ship daily if we wanted to **10%**

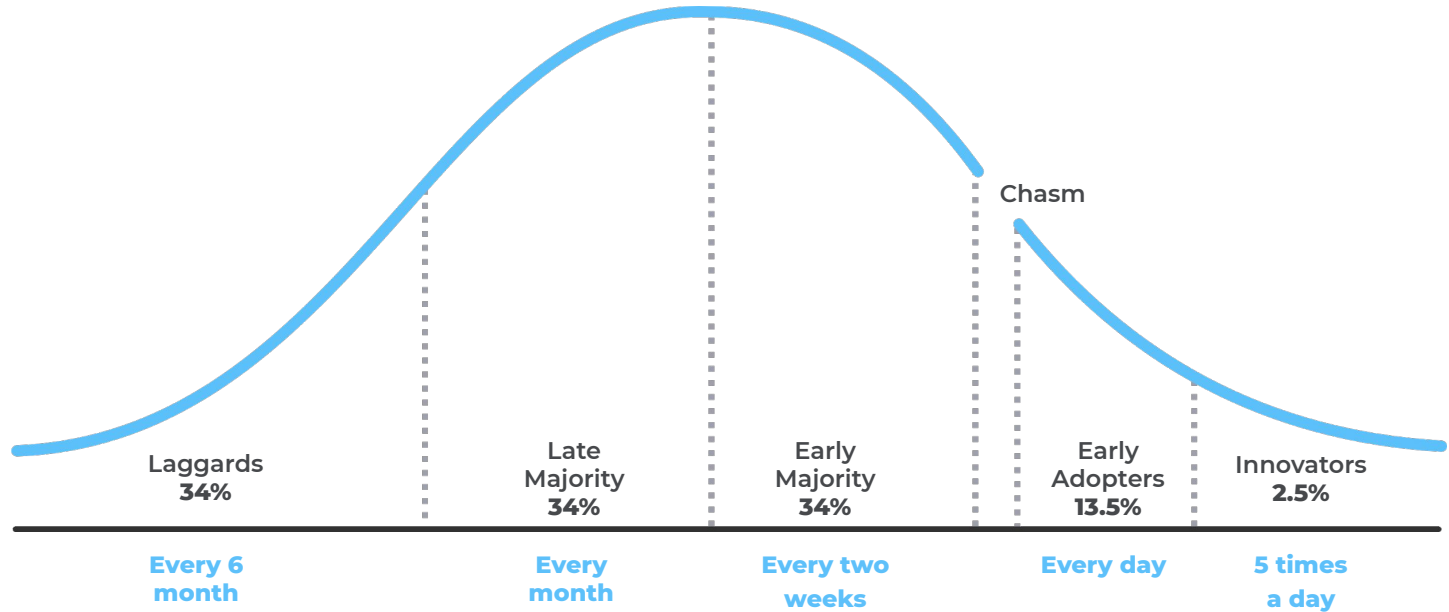


We could deploy any minute of any day **2%**

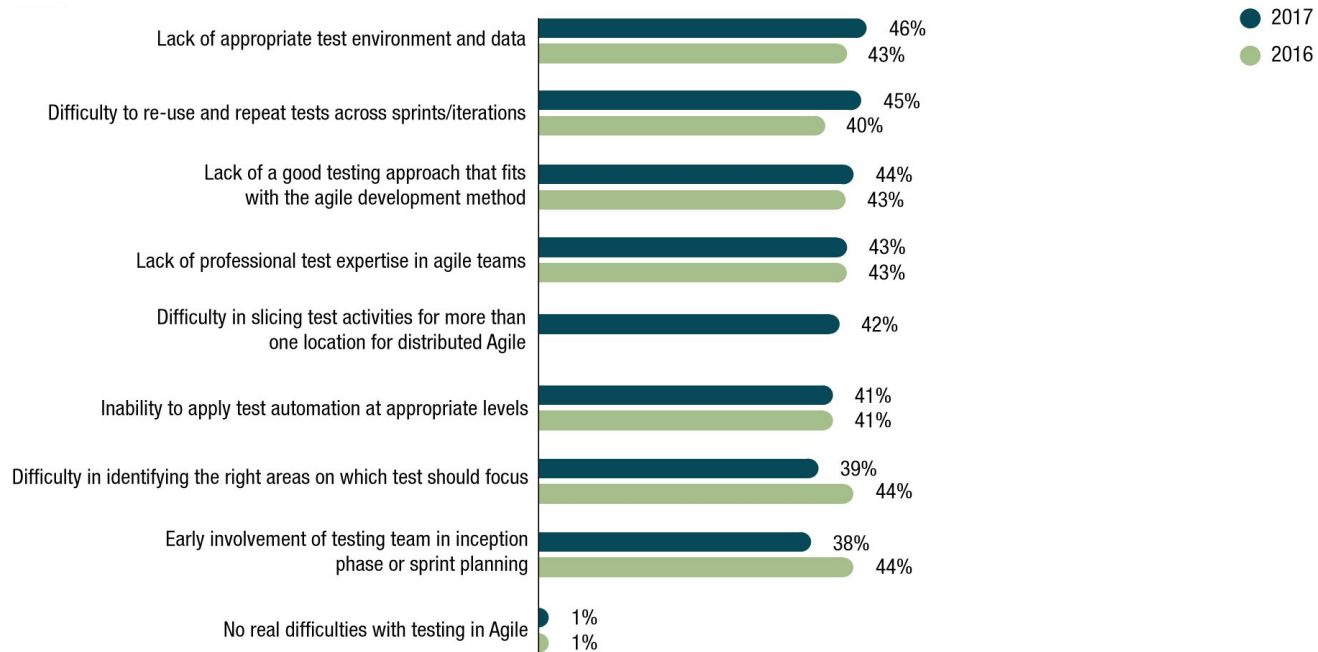




# Where it's going: Rapid Release Cycles

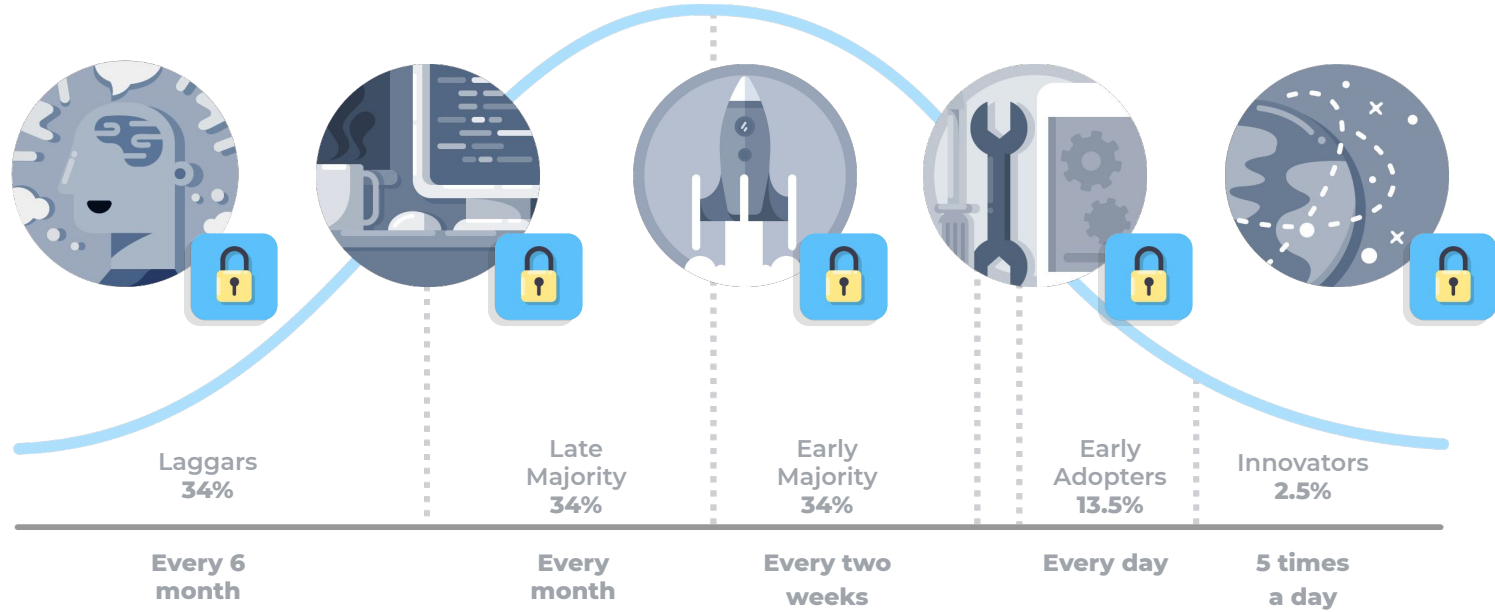



# Challenges




FROM WQR 2017

# Challenges












My Project


DOCSFORKADD USERNEW TEST

MY TEST › CLICK ON LOGIN


SAVE









Your App Login

john@myapp.com

●●●●●●●●

LOGIN








← ADVANCED

Target Element

Locators Rankings








☒ Class

BlueButton










☒ Text

Login










☒ Tag


Button





☒ ID


md-6345



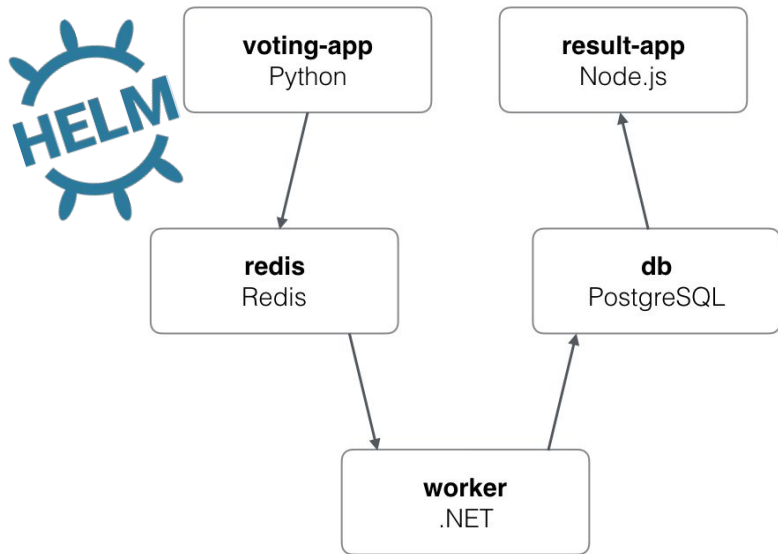
Target Parent 2

Target Parent 3

Target Parent 4

Target Parent 5

# Demo Application - Voting App

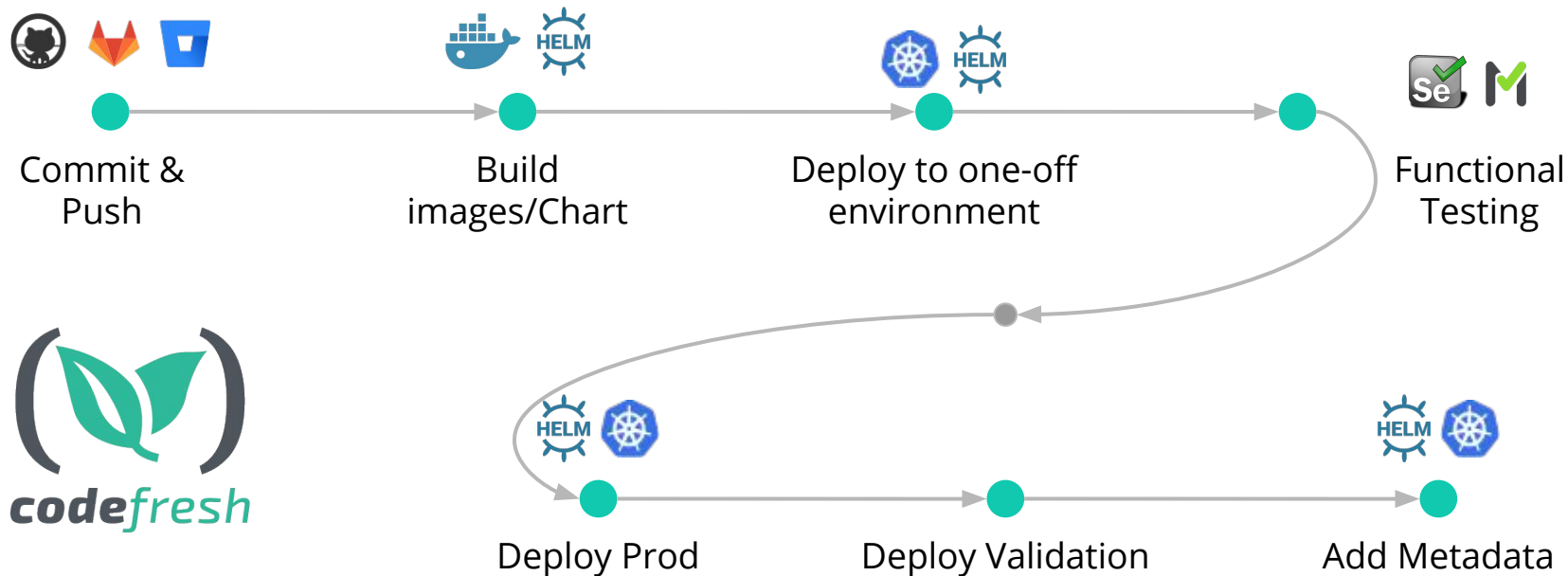


- 12-Factor Microservice App
- Packaged as a Helm Chart
- Helm makes Shift Left with Kubernetes a lot easier

<https://github.com/todaywasawesome/example-voting-app>

[Vote](#) [View Results](#)

# Continuous Delivery Pipeline w/Testim UI





# Lets Make Some Tests!



# Demo the Pipeline



# Questions?

testim✓

Schedule a Demo!

Contact us at:

[Testim.io](https://testim.io)



() **codefresh**

Schedule a 1:1

Get in touch at:

[Codefresh.io](https://codefresh.io)

