

# Kubernetes Crossing the Chasm

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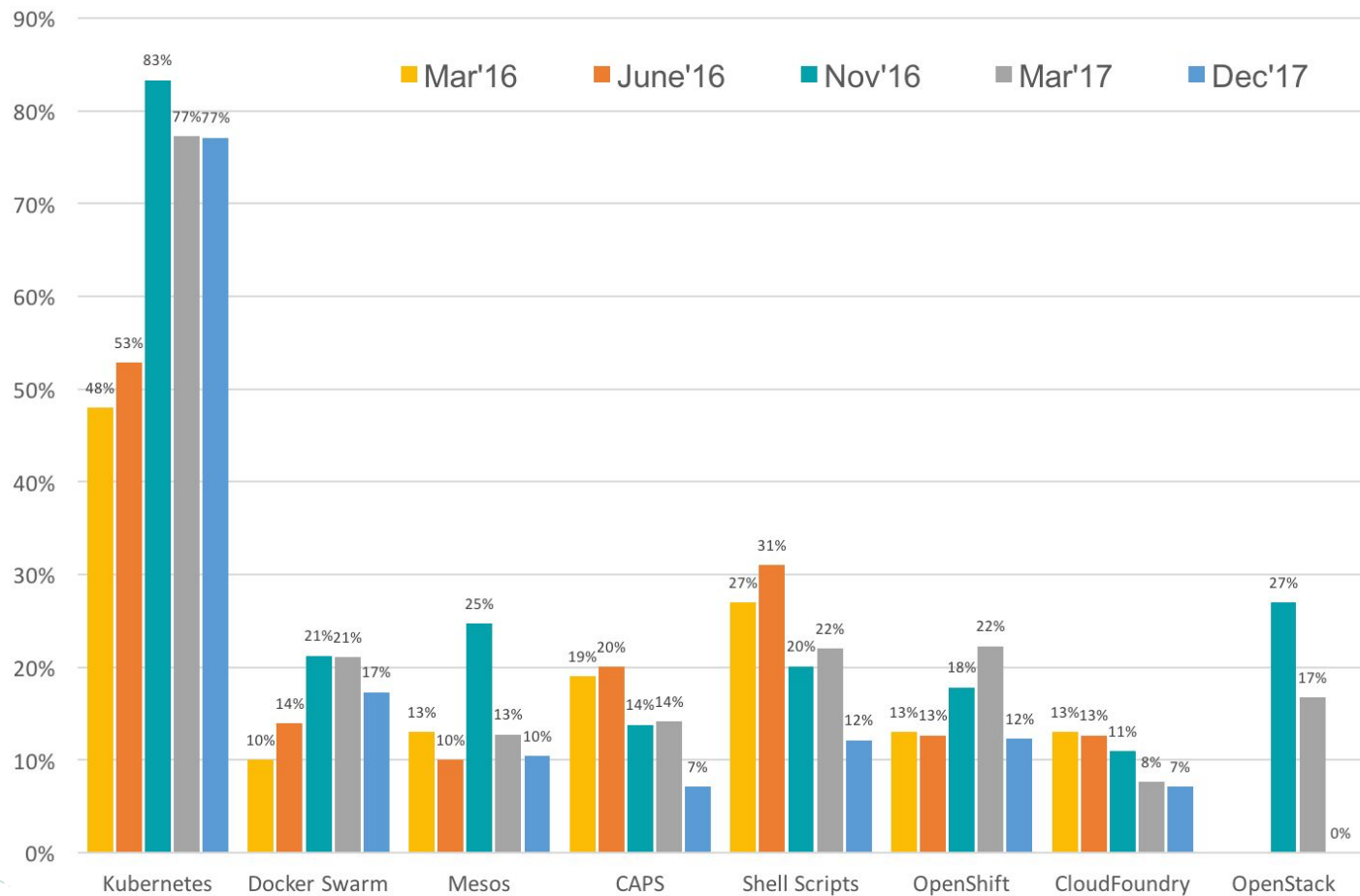




# Kubernetes

- Container Management Platform
- Automate Deployment, Scaling, Management of Applications
- Built by originally by Google, maintained by CNCF





**...25 percent** of surveyed companies were **using containers** at some stage of deployment

[source: <https://www.cloudfoundry.org/wp-content/uploads/2012/02/Container-Report-2017-1.pdf>]

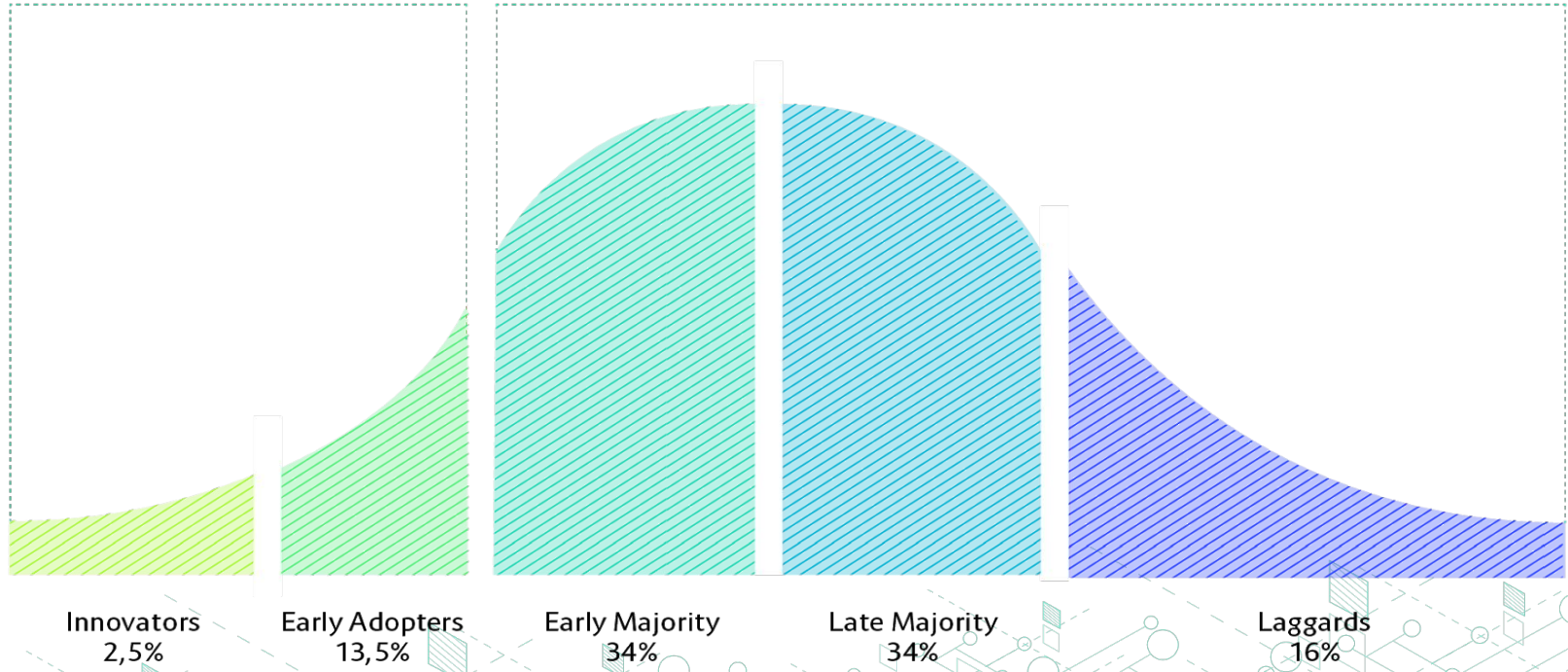
**50%** of all companies using containers have some form of **orchestration**

[source: <https://www.datadoghq.com/docker-adoption/>]

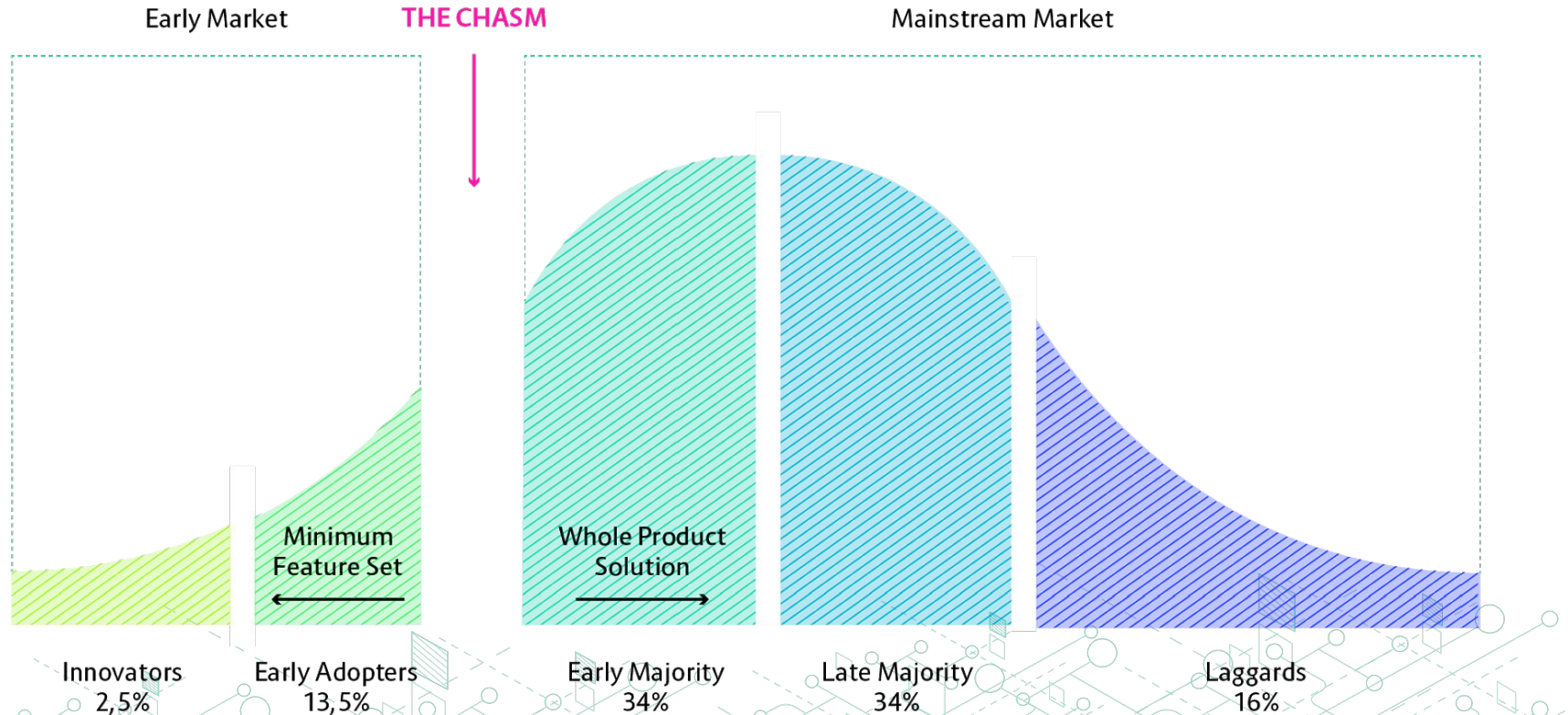
# Diffusion of Innovation

Early Market

Mainstream Market



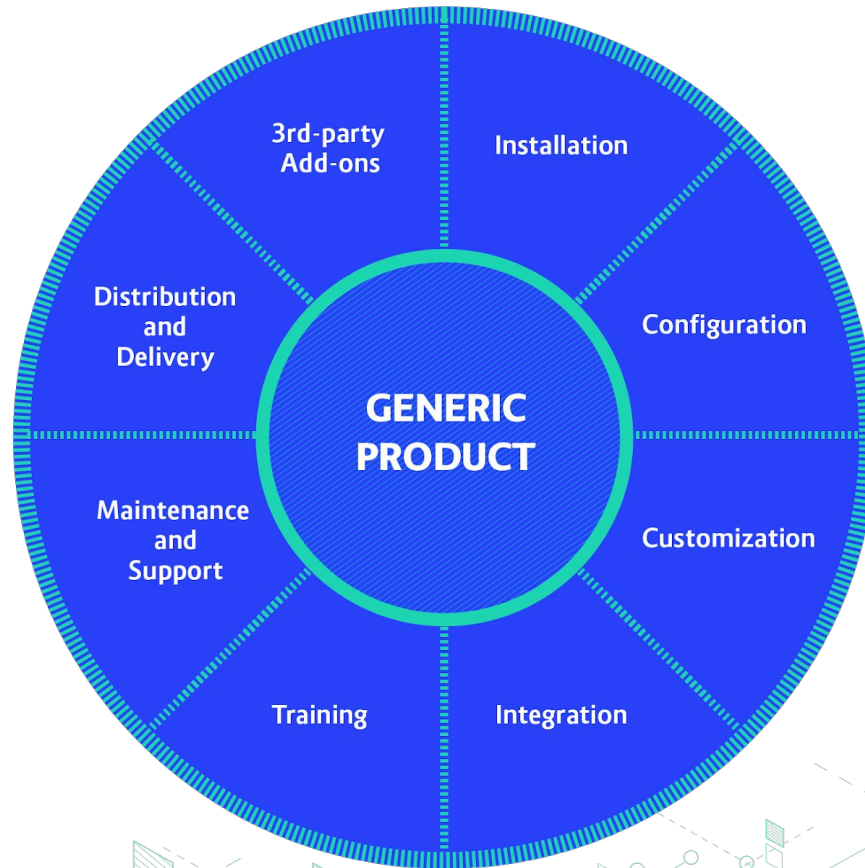
# Diffusion of Innovation





# Will Kubernetes Cross the Chasm?

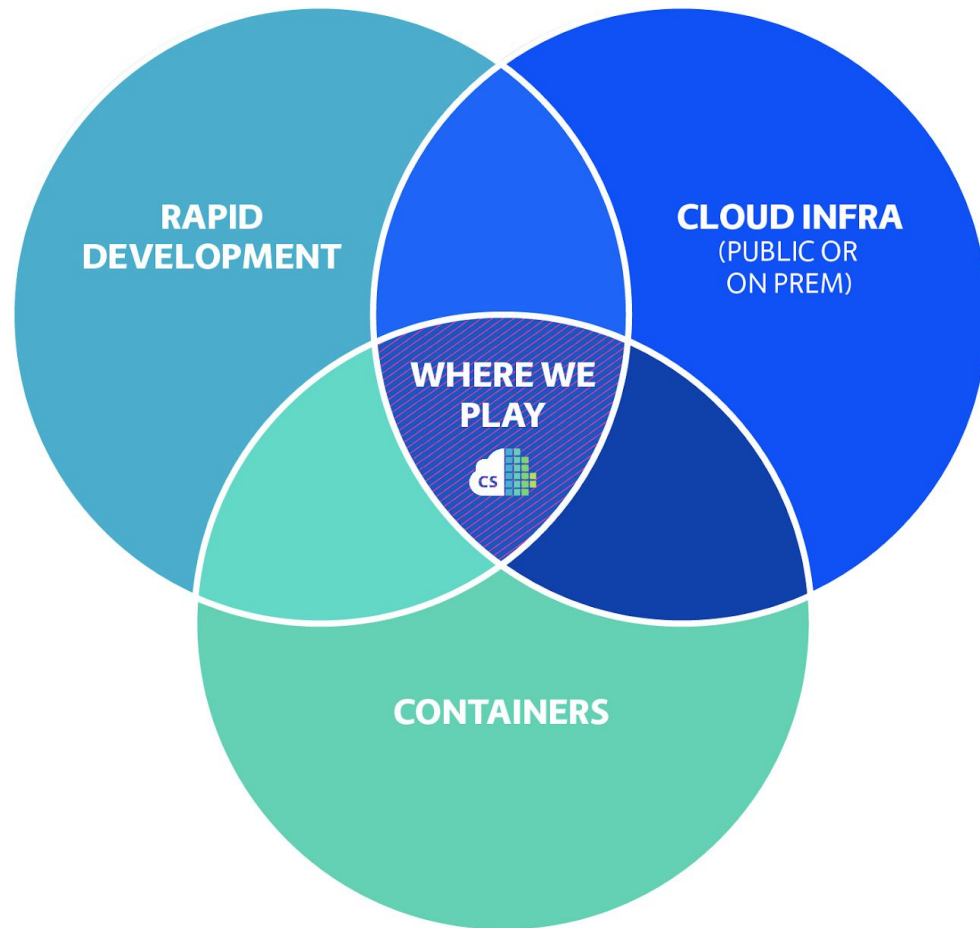




# So What?

A dramatic sky with blue and white clouds and sun rays. The sun is partially obscured by clouds at the bottom center, with rays of light fanning out across the sky. The clouds are white and fluffy, contrasting with the deep blue of the sky.

***Cloud Native is the Future of Software***



# Real World Case Studies

- Organisations we've worked with in the past year.
- Do not fit the normal Cloud Native model.
- Come with interesting challenges.
- How they can be solved.

# What is the Ideal Use Case?

THE DIGITAL WHOLESALING  
PLATFORM WHERE YOU CAN  
CONNECT, TRADE & GROW.

I AM A

BRAND

RETAILER



# Ideal Cloud Native Use Case

- No Legacy
- 100% Cloud / SaaS
- Stateless applications
- Cloud Services (e.g. Databases)



- 15 Developers to 1 Ops
- Focus on adding Business Value
- Fault tolerance, Auto Scaling, Service Discovery Out of the Box

# Student housing made easy

Book your perfect home in 400 cities worldwide

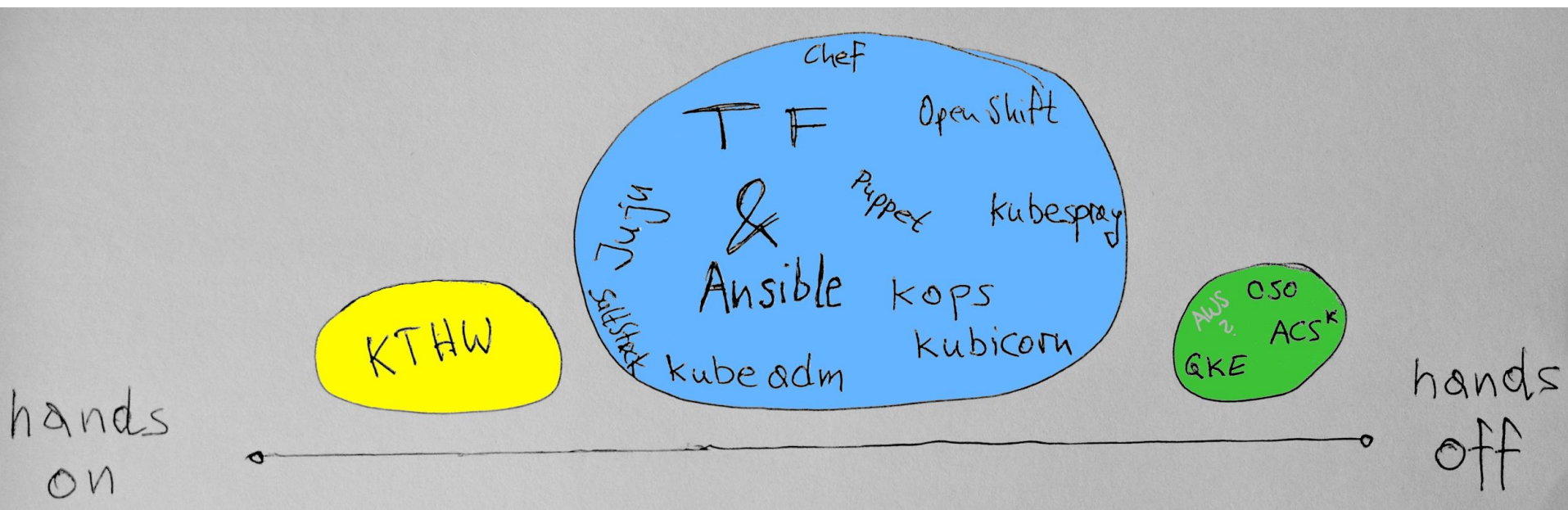
Search by college, city or neighborhood

Move in → Move out

Search

## Discover our top cities





Source: <https://blog.openshift.com/kubernetes-little-guide-install-options/>

# The Great Firewall of China





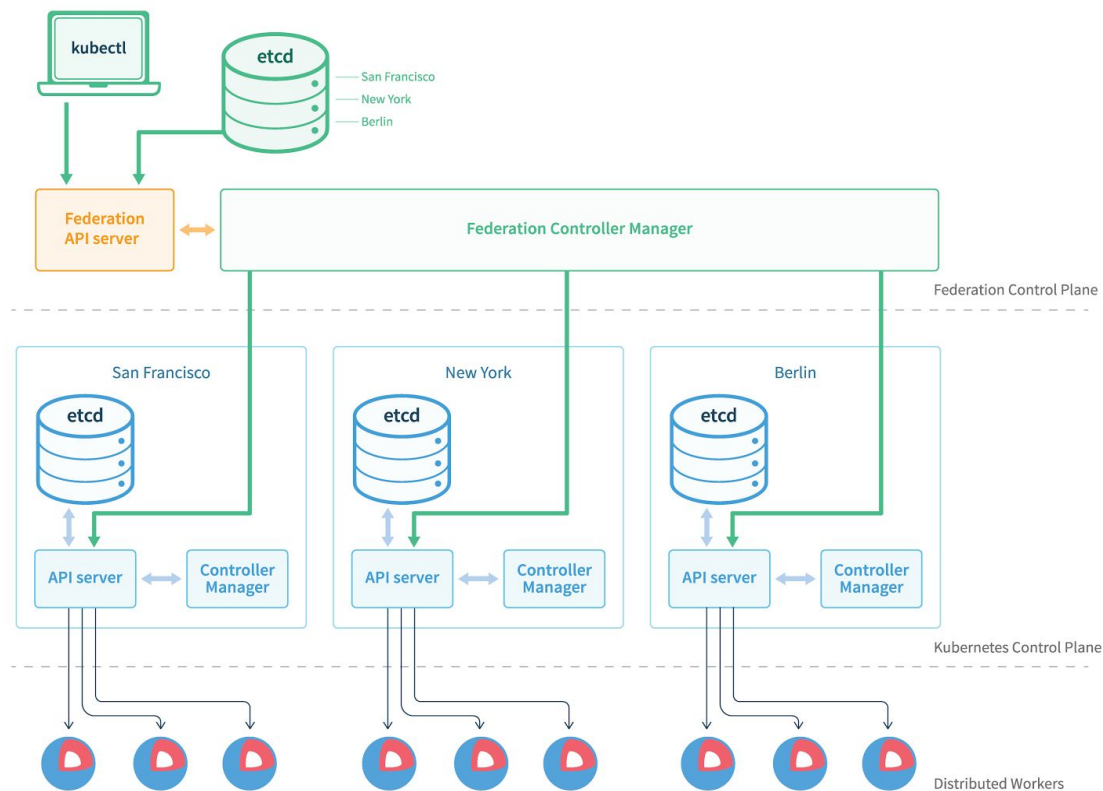
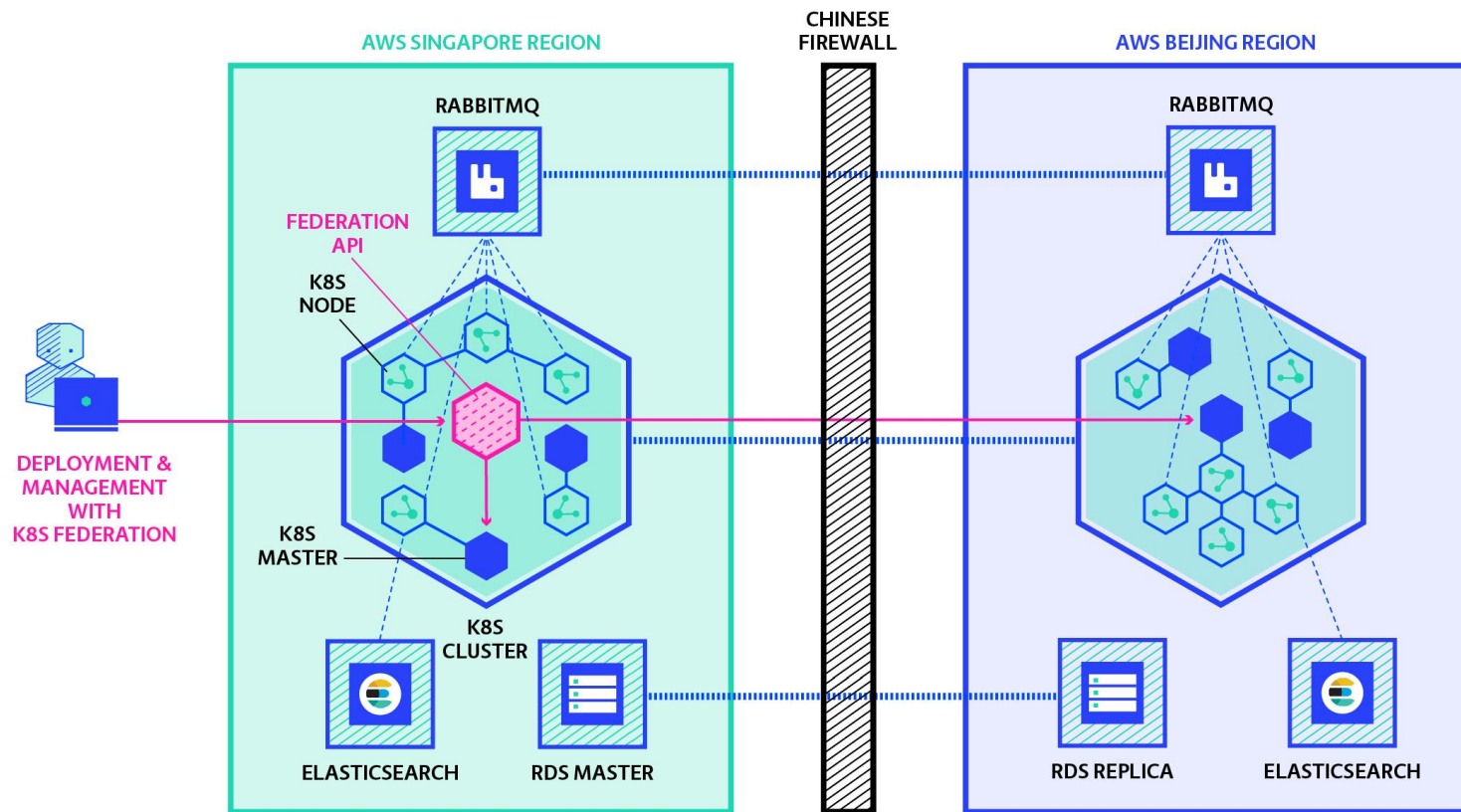


Image courtesy of CoreOS



# To Cross the Chasm

## “Whole Product”

- Mature Tooling
- Advanced Features
- Active Community





*From Traditional Enterprise to Cloud Native.*





[DOCS](#)



# The package manager for Kubernetes

Helm is the best way to find, share, and use software built for Kubernetes.





- Vastly improve the upgrade process
  - No more supporting versions for 10 years
  - No Ericsson engineers needed
- The 'new' model for enterprise software
- Kubernetes as O/S



```
<?xml version="1.0" encoding="UTF-8"?>
<ra1 angle="unit= degree">

  <System>

    <system camera_switch_mode="off" layer_switch_distance="0"/>

  <!-- Camera / Lights -->

    <camera id="cameral" type="perspective" vfov="53" znear="0.1" zfar="10000" position="15.5 9.5 47" direction="0 0 2" up="0 1 0"/>
    <light id="light1" type="point" color="1 1 1" position="27.6 34.3 56.3" attenuation="1.7 0 0"/>
    <light id="light2" type="ambient" color="1 1 1"/>
    <light id="light3" type="edge" color="1 1 1" exponent="3"/>

  <!-- Models -->

    <model id="bg" file="bg.bg"

      <material id="bt_1" effect="pure_texture alpha_1 depth_0">

        <texture file="14.dds"/>
      </material>
      <material id="bt_15" effect="pure_texture alpha_1 depth_0">

        <texture file="15.dds"/>
      </material>
      <material id="bt_16" effect="pure_texture alpha_1 depth_0">

        <texture file="16.dds"/>
      </material>

    <!-- Actors -->

      <actor id="actor1" model="bg" material="bt_1" scale="0 0 0"/>
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      <actor id="actor6" model="bg" material="bt_6" scale="0 0 0"/>
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    </model>

  </System>

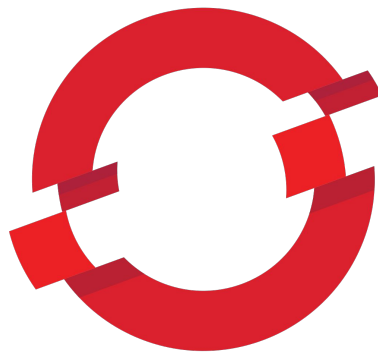
</ra1>
```

ACCESS DENIED





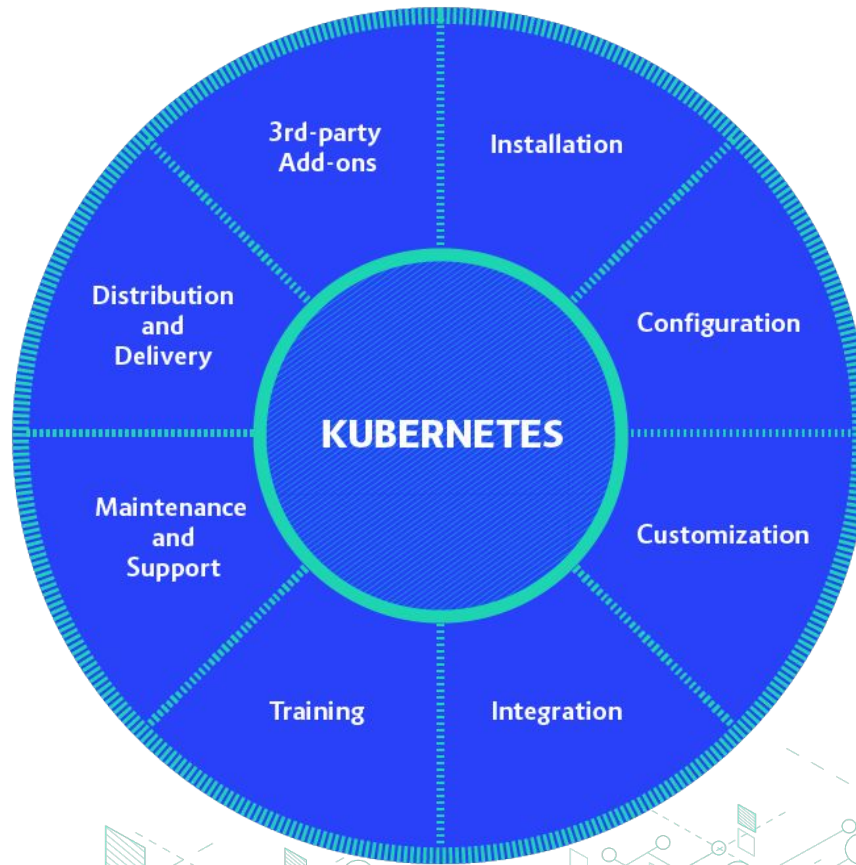
***Giant Swarm***



**OPENSIFT**



**APPRENDA**

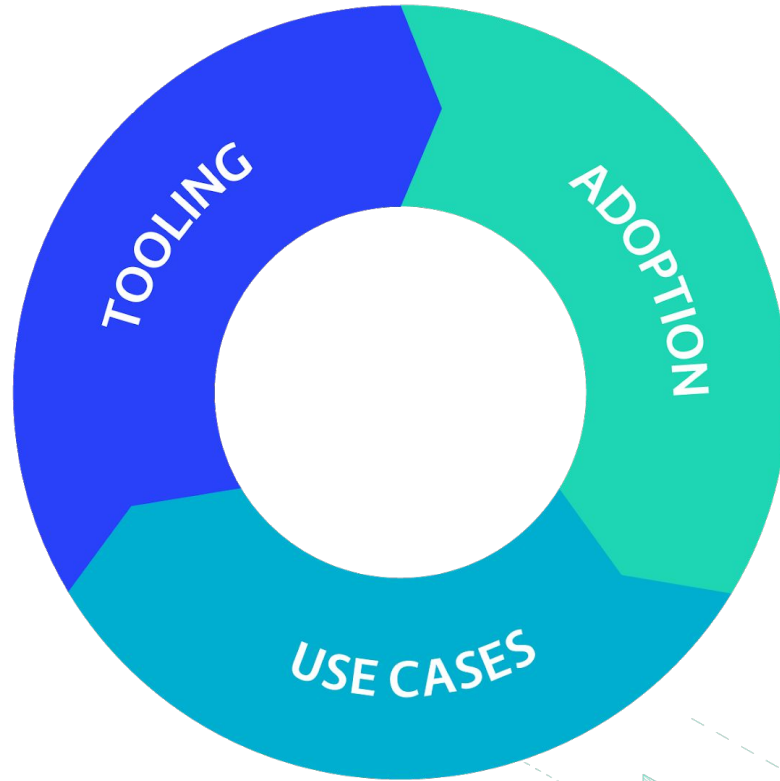


# More Challenges

- Support for Windows
- Integration with Legacy/Vendor Software
- Hybrid Cloud
- ???

# Will Kubernetes Cross the Chasm?





# *When* Will Kubernetes Cross the Chasm?



# Thanks.

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